

# Nunam Iqua Strategic Plan For Comprehensive Community Development 2005



**TABLE OF CONTENTS**

<b>1.0 INTRODUCTION</b>	7
<b>2.0 COMMUNITY VALUES</b>	8
<b>3.0 COMMUNITY GOALS AND OBJECTIVES</b>	8
<b>4.0 COMMUNITY STRATEGIC PLANNING PROCESS</b>	9
4.1 Nunam Iqua Advisory Planning Board	9
4.2 Public Participation	10
<b>5.0 BACKGROUND FOR PLANNING</b>	11
5.1 History	11
5.2 Location	12
5.3 Size	13
5.4 Geology and Topography	14
5.5 Soils	14
5.6 Climate	14
5.7 Flood	14
5.8 Fish and Wildlife	15
5.9 Threatened and Endangered Species	15
<b>6.0 POPULATION AND ECONOMY</b>	16
6.1 Population Statistics	16
6.2 Population Forecast	16
6.3 Income Levels	17
6.4 Cost of Living Factors	17
6.5 Composition of Employment	18
6.6 Barriers to Development	19
6.7 Potential for Growth	19
<b>7.0 EXISTING LAND USE</b>	19
7.1 Land Status/Land Tenure	19
7.2 14(c)(3) Lands Reconveyance Status	19
7.3 Residential land use	19
7.4 School Land Use	20
7.5 Community Land Use	20
7.6 Utility Land Use	21
7.7 Economic Development Land Use	21
7.8 Church Land Use	21
7.9 Transportation Land Use	21
<b>8.0 FUTURE LAND USE</b>	21
8.1 Residential Future Land Use	22
8.2 School Future Land Use	22
8.3 City Government Future Land Use	22
8.4 Utility Future Land Use	22
8.5 Tribal Government Future Land Use	22
8.6 Economic Development Future Land use:	22
<b>9.0 EXISTING COMMUNITY BUILDINGS AND PROGRAMS</b>	23
9.1.1 Community Hall	24
9.1.1.1 Tribal Office	24

## Nunam Iqua Strategic Plan

9.1.1.2 Activity Room.....	24
9.1.2 Health Clinic.....	25
9.1.3 City Complex.....	25
9.1.3.1 Post Office.....	25
9.1.3.2 City and Utility Offices.....	25
9.1.4 Public Safety .....	25
9.1.4.1 Police .....	25
9.1.4.2 Fire Prevention.....	25
9.1.5 Corporation Building.....	26
9.1.5.1 Corporation Office.....	26
9.1.6 Housing .....	26
9.2 UTILITIES .....	27
9.2.1 Telephone and Internet .....	27
9.2.2 Waterplant.....	27
9.2.3 Washeteria .....	28
9.2.4 Wastehaul .....	28
9.2.5 Solid Waste .....	28
9.2.6 Water/Sewer .....	28
9.2.7 Nunam Iqua Electric Company (NIEC) .....	29
9.3 TRANSPORTATION.....	30
9.3.1 Boat/Barge .....	30
9.3.1.1 Barge Landing Pad .....	30
9.3.2 Airport .....	30
9.3.3 Boardwalks .....	30
9.3.4 Gravel Roads .....	30
9.3.4.1 River Road.....	30
9.3.5 Causeway .....	31
9.4 EDUCATIONAL OPPORTUNITIES .....	31
9.4.1 Lower Yukon School District (LYSD) .....	31
9.4.1.1 New School.....	31
9.5 SOCIAL/HEATH PROGRAMS .....	31
9.5.1 Indian Child Welfare Act.....	31
9.5.2 Natural Helpers.....	32
9.5.3 Youth/Elder Program.....	32
9.6 EMPLOYMENT OPPORTUNITIES.....	32
9.6.1 Local Entities.....	32
9.6.1.1 Lower Yukon School District.....	32
9.6.1.2 City of Nunam Iqua .....	32
9.6.1.3 Nunam Iqua Traditional Council.....	33
9.6.1.4 Swan Lake Corporation .....	33
9.6.2 Local Entities Profit Business .....	33
9.6.2.1 City Hotel.....	33
9.6.2.2 Tribal Store.....	34
9.6.2.3 Nunam Iqua Trading Post .....	34
9.6.3 Enterprises and Miscellaneous .....	34
9.6.3.1 Commercial Fishing.....	34

## Nunam Iqua Strategic Plan

9.6.3.2 YKHC.....	34
9.6.3.3 Airlines .....	34
9.6.2.4 Strongheart's Associates Store .....	34
9.6.2.5 Handicrafts .....	35
9.6.2.6 Entitlements.....	35
<b>10.0 STRATEGIC IMPROVEMENT PLAN.....</b>	<b>36</b>
<b>10.1 PROJECTS AND PROGRAMS THAT NEED ASSISTANCE .....</b>	<b>37</b>
10.1.1 Water Sewer:.....	37
10.1.2 Housing .....	37
10.1.3 Post Office.....	38
10.1.4 Police .....	38
10.1.5 Fire Prevention.....	39
10.1.6 Solid Waste .....	39
10.1.7 Tank Farm.....	40
10.1.8 Power Lines .....	41
10.1.9 NITP Store.....	41
10.1.10 NITP Tank Farm .....	42
<b>10.2 NEW FACILITIES AND HOUSING PROJECTS .....</b>	<b>43</b>
10.2.1 Tribal Building:.....	43
10.2.2 Playground.....	43
10.2.3 Day Care .....	44
10.2.4 Graveyard .....	45
10.2.5 Youth Center .....	45
10.2.6 Public Sauna.....	46
10.2.7 Library .....	46
10.2.8 Upgrade Houses .....	47
<b>10.3 NEW UTILITIES PROJECT .....</b>	<b>48</b>
10.3.1 Wind Generator .....	48
<b>10.4 NEW TRANSPORTATION PROJECTS .....</b>	<b>49</b>
10.4.1 Runway Expansion .....	49
10.4.2 Heavy Duty Boardwalks: .....	49
10.4.3 School/Lagoon Gravel Road .....	50
10.4.4 Airport Gravel Road: .....	50
10.4.5 Boat Harbor.....	51
<b>10.5 NEW EDUCATIONAL OPPORTUNITIES .....</b>	<b>52</b>
10.5.1 Head Start Preschool .....	52
10.5.2 Old school buildings.....	52
10.5.3 Workforce Development .....	53
<b>10.6 NEW ENVIRONMENTAL PROGRAMS .....</b>	<b>53</b>
10.6.1 Subsistence Protection .....	53
10.6.2 Disaster Plans .....	54
10.6.3 Erosion .....	54
<b>10.7 NEW ENTERPRISE EMPLOYMENT OPPORTUNTIES .....</b>	<b>55</b>
10.7.1 Flyout Fishery.....	55
10.7.2 Ice maker .....	55
<b>11.0 CARRYING OUT THE PLAN.....</b>	<b>57</b>

## Nunam Iqua Strategic Plan

11.1 Lead Responsibility.....	57
11.2 Adoption.....	57
11.3 Review Process .....	58
12.0 ACKNOWLEDGEMENTS .....	58
12.1 Planning Contributors.....	58
12.2 References.....	58

### **APPENDIX A: Support Resolutions**

### **APPENDIX B: Name Change**

### **APPENDIX C: Community Funding**

- DCED Community Funding Database
- RAPIDS

### **APPENDIX D: Regional Organizations**

### **APPENDIX E: Subsistence Resources**

### **APPENDIX F: Maps**

- Airport Improvement 2005
- Erosion Map 1951-2001
- Future Land Use Map
- Graveyard Location Map
- Native Allotment Map 2005
- Survey Aerial Basemap 2003
- Wetland Habitat Map 2005

### **Available on CD**

### **APPENDIX G: Resources and Link**

### **APPENDIX H: Reports**

- Causeway Conceptual Plan 2005
- Causeway Feasibility Study 2002
- Nunam Iqua Water/Sewer Improvements Plan 1998
- RUBA Report 2005
- Wade Hampton Census Area Economic Overview
- Wetland Delineation report 2005

### **APPENDIX I: Soil Studies**

- Airport Geotech Report 1993
- Causeway and Lagoon Soils Investigation 2001

### **APPENDIX J: Environmental Assessments**

- Airport Improvement Project 2005
- Causeway 2004

## Nunam Iqua Strategic Plan

### TABLE OF FIGURES

Figure 1: Nunam Iqua Advisory Planning Board Members .....	9
Figure 2: Community Get-Together .....	10
Figure 3: E. Adams, Sr. & Benedict Tucker Photo.....	12
Figure 4: Julia Afcan and Fred Augustine Photo.....	12
Figure 5: State of Alaska Map .....	12
Figure 6: Yukon Delta Map .....	13
Figure 7: Population Distribution .....	16
Figure 8: Historical Population Forecast .....	16
Figure 9: Current Population Forecast.....	17
Figure 10: 2000 Income Levels .....	17
Figure 11: Year round Employment .....	18
Figure 12: Seasonal Employment .....	18
Figure 13: Other Income .....	18
Figure 14: Community and Facilities Land Use Map.....	21
Figure 15: Future Land Use Map.....	21
Figure 16: Existing Community Buildings and Programs Chart.....	23
Figure 17: Facilities and Utilities Photo .....	24
Figure 18: Housing Photo .....	26
Figure 19: Tank Farm and Transportation Photo.....	29
Figure 20: Stores and Hotel Photo.....	33
Figure 21: Strategic Plan Summary Chart .....	36
Figure 22: New Captial and Planning Projects-Lead Responsibility.....	57

### ABBREVIATIONS

**ATV- All Terrain Vehicle**  
**AVCP-Association of Village Council Presidents**  
**BIA- Bureau of Indian Affairs**  
**DCED- Department of Community and Economic Development**  
**DOT- Department of Transportation**  
**FEMA- Federal Emergency Management Agency**  
**HUD- Department of Housing & Urban Development**  
**LYSD- Lower Yukon School District**  
**NIAPB- Nunam Iqua Advisory Planning Board**  
**NIEC- Nunam Iqua Electric Company**  
**NITP- Nunam Iqua Trading Post**  
**USDA- Untied States Department of Agriculture**

## 1.0 INTRODUCTION

The Nunam Iqua Strategic Plan was done locally, using community planning handbooks. Community leaders and residents got together to make the decisions that will determine the future of the village.

Existing programs and facilities were assessed. Community needs were identified. The result is a blueprint for comprehensive development that supports the values and goals of Nunam Iqua residents.

In the past, development in Nunam Iqua focused on infrastructure. The primary source of income was commercial fishing of salmon returning to the Yukon River to spawn. In 2000, the commercial salmon fishing industry collapsed. The need for a comprehensive plan for development became greater with the added loss of State Revenue Sharing.

Fortunately community wide water/sewer construction was funded and scheduled for completion in 2007-2008. The FY06 legislative budget included construction funds for a new school and the Airport Improvement Project design phase is well underway, with possible construction funding as early as 2007.

Nunam Iqua remains in a constant state of evolution, subject to unpredictable outside forces. The comprehensive community development plan addresses projects and programs that need improvement, as well as identifying new ones.

It has taken almost a year to complete the Nunam Iqua Strategic Plan. Creating the plan was only the beginning. Many of the new projects that were identified are already in the initial action phases. Implementation is necessary for Nunam Iqua to evolve into a balanced and sustainable community.

Sustainability is not a new priority. The City has owned and operated a financially sound Electric Company since 1985. Since the early 1990's, the City has successfully managed a wastehaul system that provides minimal sanitation. The waterplant and washeteria collect revenues to cover costs. The new clinic building is properly maintained. All future facilities and programs are required to have business plans and/or identify funding sources.

To be sustainable, a community must be balanced. The Nunam Iqua Strategic Plan will take time to complete. The relative priority of the social programs and capital projects is left to an annual review of elected officials. They will know best how to have controlled but steady development of infrastructure and economy, while maintaining community balance.

## 2.0 COMMUNITY VALUES

- **Small quiet community**
- **Family and friends**
- **Subsistence**
- **Working Together**
- **Good Jobs**
- **Education and Training**

**Nunam Iqua Vision Statement:** A small quiet community of family, relatives, and friends working together pursuing to live our Yupik way of lifestyle with respect to our surrounding land and waters for subsistence. Respecting our elders wisdom, knowledge, values, and our Yupik practices, at the same time pursuing higher education and training with the goal of good jobs, leadership, controlled but steady development of infrastructure and economy for betterment of lives with meaningful activities for our elders, young adults, parents, and their children.

## 3.0 COMMUNITY GOALS AND OBJECTIVES

- **To support the pursuit of a subsistence lifestyle**
- **To have controlled but steady development of infrastructure and economy**
- **To have the knowledge of elders passed on to the younger generation, including traditional Eskimo dance and music and the Yupik language**
- **To have meaningful activities for elders, parents, children, and youth**
- **To encourage young people to earn a diploma or GED**
- **To provide satisfying local employment**



## 4.0 COMMUNITY STRATEGIC PLANNING PROCESS

### 4.1 Nunam Iqua Advisory Planning Board

The Nunam Iqua Strategic Plan for Comprehensive Community Development is a result of an effort by the Nunam Iqua Advisory Planning Board (NIAPB) to find a community consensus on future growth and development in the village of Nunam Iqua.

The Nunam Iqua Advisory Planning Board (NIAPB) was established in 2001. The seven members include a representative from the Nunam Iqua City Council, the Nunam Iqua Traditional Council, the Swan Lake Corporation, the Sheldon Point Advisory School Board, the residents, and the community's youth, as well as the Swan Lake Corporation Land Planner. Entity representatives are appointed for one year terms. The resident and youth representatives are selected by the appointed members after the November election, and the Land Planner is a Corporation employee.

Nunam Iqua Advisory Planning Board 2005

Representing	Name	Title	Appt.
Residents	Mary Stuart	Chairman	11/04
Swan Lake Corporation	Frank Camille	Vice-Chairman	11/04
City	Alan Peter	Member	11/04
Youth	Francine Afcan	Member	11/04
Traditional Council	Edward J. Adams, Sr.	Member	11/04
Advisory School Board	Roger Canoe	Member	2/05
Land Planner	James O'Malley	Member	11/01

Figure 1: Nunam Iqua Advisory Planning Board Members

To prepare the Nunam Iqua Strategic Plan, NIAPB members decided on a series of public meetings, workshops, questionnaires, and Community "Get-Togethers". This method was to assure participation by as many members of the community as possible.

- All meeting announcements were posted and the public invited to attend.
- Questionnaires were handed out door to door, with the offer of translation, reading, and writing assistance. The response rate was 63% and 64% for Questionnaires #1 and #2 respectively.
- Community members were informed of the Get-togethers by signs posted in advance, follow-up VHF announcements in Yupik and English, and house to house invitations by young people. Door prizes and questionnaire raffles were used as motivators. The first Get-Together had 64 participants, the second had 47, and the third had 38. Information and discussions were translated into both Yupik and English, so that all residents could understand.

## 4.2 Public Participation



Figure 2: Community Get-Together

Minutes were taken for all meetings, workshops, and Get-togethers and are available in the NIAPB office for review. There have been 8 Public Meetings, 12 workshops, 2 Surveys, and 3 Community Get-Togethers.

July 15, 2004- NIAPB Public Meeting

November 24, 2004-NIAPB Public Meeting

December 1, 2004-NIAPB Public Meeting

December 1, 2004- NIAPB Workshop

December 6, 2004- NIAPB Workshop

December 30, 2004- NIAPB Workshop

January 5, 2005- NIAPB Workshop

January 20, 2005 NIAPB Workshop

January 26, 2005 NIAPB Public Meeting

QUESTIONNAIRE #1 Distributed to all residents 18 or older... 57 returned (63%)

February 3, 2005 NIAPB Workshop

February 8, 2005 **Community Get-Together**

February 16, 2005 NIAPB Workshop

February 23, 2005 NIAPB Workshop

February 24, 2005 NIAPB Workshop

March 2, 2005- NIAPB Workshop

March 16, 2005- NIAPB Workshop

QUESTIONNAIRE #2 Distributed to all residents 18 or older... 64 returned (64%)

March 22, 2005- **Community Get-Together**

March 24, 2005- NIAPB Public Meeting

April 20, 2005- NIAPB Public Meeting

July 8, 2005-NIAPB Workshop

July 26, 2005-NIAPB Public Meeting

August 11, 2005- NIAPB Special Meeting

August 17, 2005- **Community Get-Together**

## 5.0 BACKGROUND FOR PLANNING

### 5.1 History

Nunam Iqua was historically the location of summer fish camps. Fred Augustine and Julia Afcan remember it as a place of hunting and gathering berries and greens. Benedict Tucker was the oldest to remember coming as a small child, when the grass was taller than he was. A white man named Sheldon was the first to settle in Nunam Iqua,



**Figure 3: E. Adams & Benedict Tucker**

operating a small store. There was a Northern Commercial Company (NC) store across the river and a fishery on Munsen Island. After the big flood, the NC store moved to Nunam Iqua on higher ground.

Everything was done by hand back then, even unloading the barge. Boats were rowed and king salmon sold for 50 cents each. The early fish net webbing was made with cotton twine and there was so much fish, the netting was wrapped unto the float line, as it was being cleaned of fish, to prevent anymore from being caught.

Josephine Charlie said that Nunam Iqua was lots quieter in the old days, at least until the birds came. Then there would be so many swans on the lake, the noise kept people awake at night. The land had no willows at that time; it was flat with some tundra. Where people originally stayed, is now lost due to erosion from the strong currents and high floods. Permafrost by the bank melts when the bank is eroded, causing the land to sink.

The first federal census was conducted in the village in 1950, and 43 residents were recorded. The first Bureau of Indian School was built in 1964, and the City of Sheldon Point was incorporated in 1974. Almost all the houses were drift wood log structures until 1979, when thirteen houses were built on pilings by the Association of Village Council Presidents Regional Housing Authority. Construction through the 1980's included a new high school, an electric company, and a washeteria. Boardwalks were widened and people no longer had to step off to let a three wheelers pass.

In 1997, the washeteria burned down, just as the Community Hall went up. The salmon failed to return in abundance, and the primary source of income was lost. Residents voted to change the name of the City of Sheldon Point back to its original name in 1999. Nunam Iqua in Yu'pik means "the end of the tundra".



**Figure 4: Julia Afcan and Fred Augustine**



# Nunam Iqua Strategic Plan

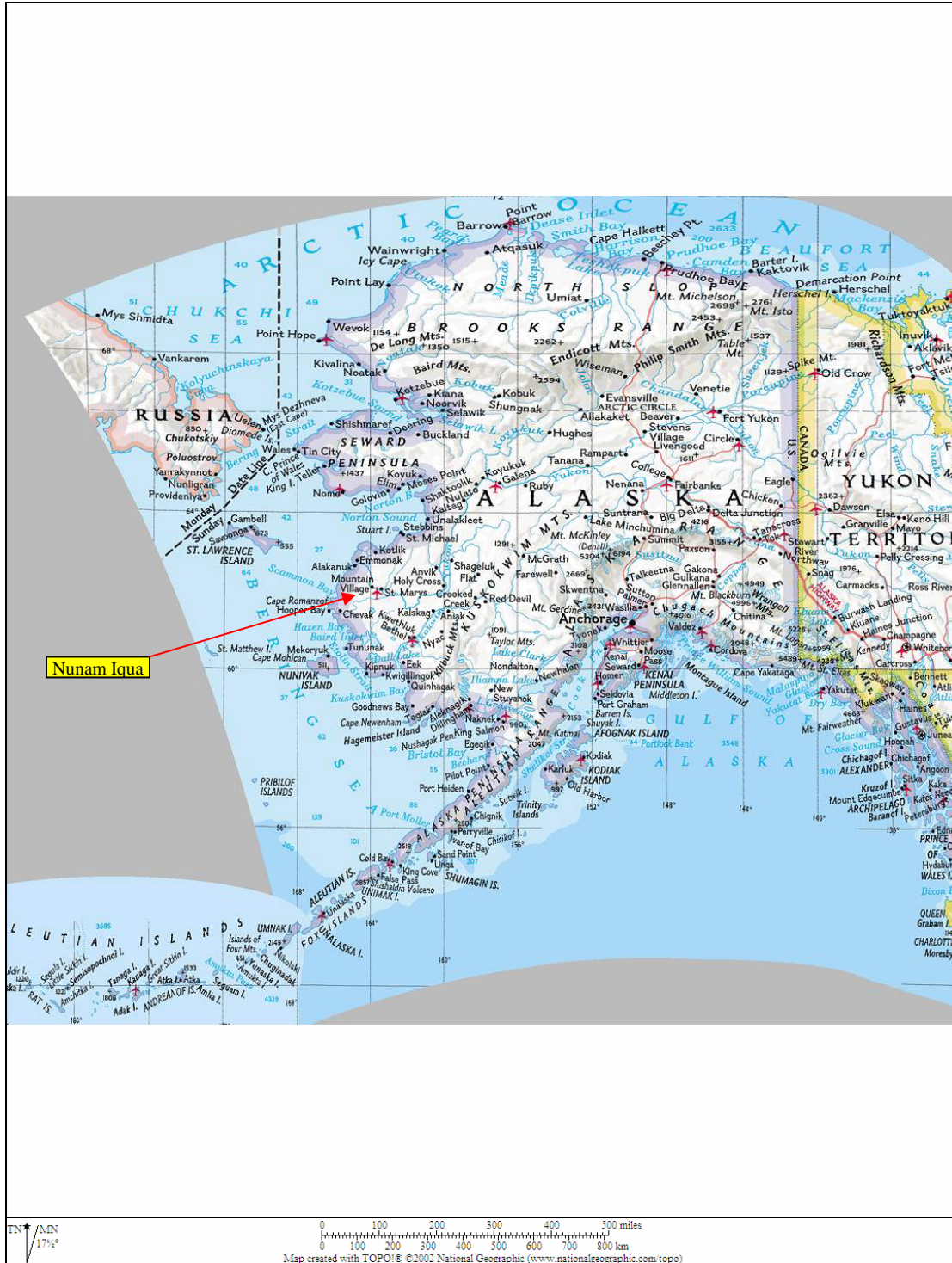


Figure 5: State of Alaska Map

## 5.2 Location

Nunam Iqua is on a south fork of the Yukon River, about 9 miles (14.5 km) south of Alakanuk and 18 miles (29 km) southwest of Emmonak on the Yukon-Kuskokwim Delta. It lies 500 miles northwest of Anchorage. It lies at approximately 62 degrees North Latitude and 164 degrees West Longitude (Sec. 10, TO28N, R084W, Seward Meridian).



## Nunam Iqua Strategic Plan

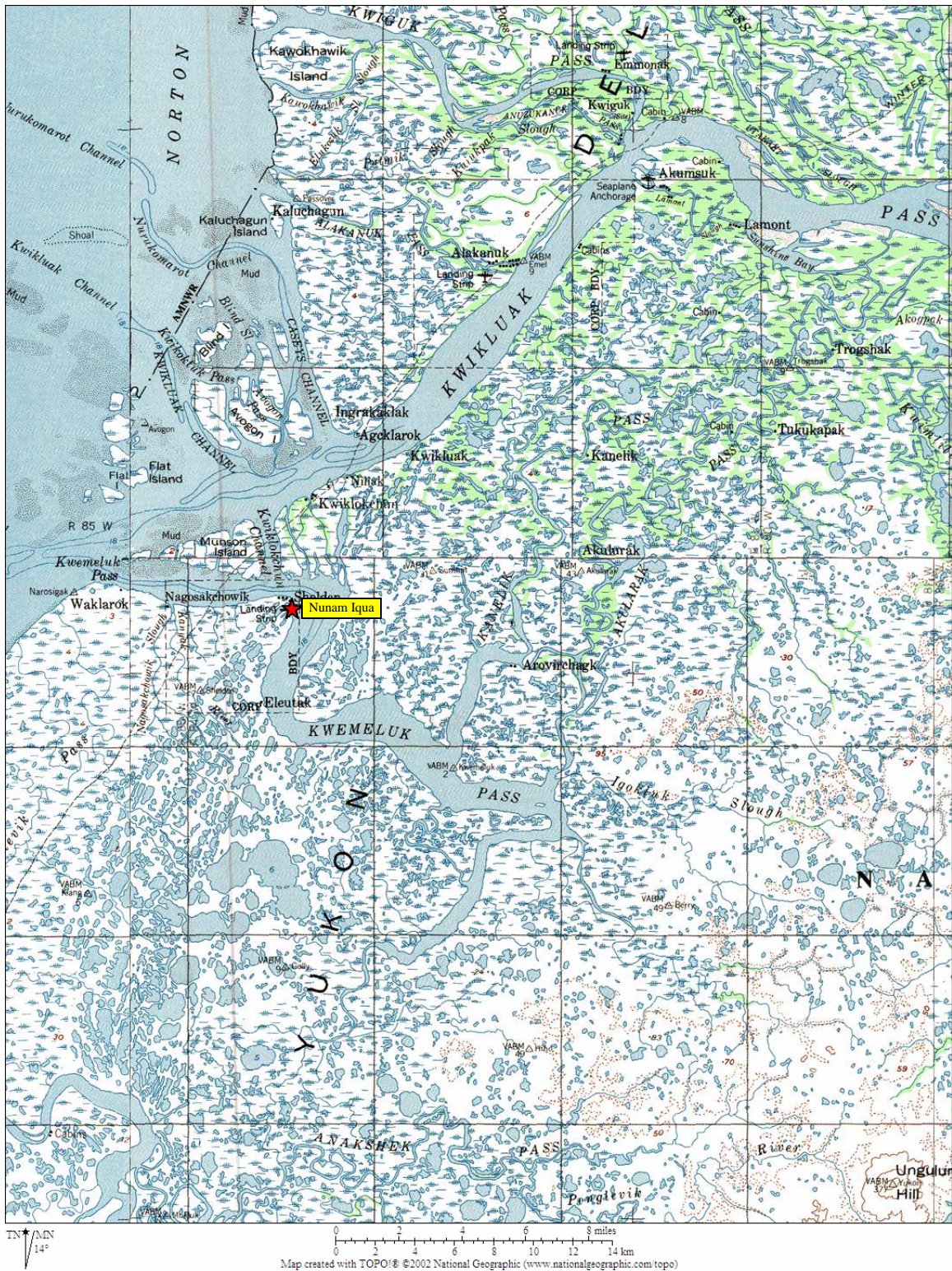


Figure 6: Yukon Delta Map

### 5.3 Size

Nunam Iqua is located in the Bethel Recording District. The City of Nunam Iqua encompasses 13.2 square of land and 5.3 miles of water.



## Nunam Iqua Strategic Plan

### 5.4 Geology and Topography

The Yukon-Kuskokwim Delta region is an alluvial plain built up of deposited silts, sands, and gravel. The deposits, which may be up to 91 meters thick, are underlain by marine, early alluvial, and wind blown deposits. No bedrock outcrops exist in the immediate Nunam Iqua area. The area is a flat flood plain and the terrain includes numerous thaw lakes and slough channels between the lakes. Generally, the elevations range from about 1.5 m to 4 m (at the airstrip) above sea level.

### 5.5 Soils

Tundra wetlands are abundant in the Yukon Delta region. The general Nunam Iqua area is a wetland. The area around Nunam Iqua has numerous tundra ponds and slough channels, including Swan Lake, a two-foot deep tundra pond (3,400 feet long x 800 feet wide) that is a dominant water body in the community. Any major construction will impact wetlands. However, as the entire community is located in a wetland area and there is no practicable alternative to construction in wetlands. All of this vegetation has been classified as wetlands by the Army Corps of Engineers. See **Appendix F- Wetland Habitat Map 2005** and **Appendix H- Wetland Delineation Report 2005**.

Drainage is poor around the community due to low relief and the presence of permafrost, which prevents percolation of surface water. Thus the land surface is soft and marshy during summer and fall. The soils in the community are generally stratified silty and sandy alluvial deposits. Organic soils occupy many shallow depressions. No known gravel deposits or rock outcrops have been found in the area and any gravel requirements are fulfilled by barge shipment from St. Mary's or Saint Michael. Drainage is poor around the community due to the low relief and the presence of permafrost, which prevents percolation of surface waters. Permafrost is extensive; the total depth has not been determined. See **Appendix I: Soil Studies**.

There is no groundwater resource. The primary potable water resource in the area is the Yukon River from which the City gets its water.

### 5.6 Climate

The climate in Nunam Iqua is transitional, influenced by continental conditions in winter and maritime conditions in summer. Although the community is near the coast, maritime influences are reduced in winter due to the ice pack on the Bering Sea. Temperatures range from -25 F to 78 F. The mean January minimum temperature is 4 F and the mean July maximum temperature is 56 F. The mean annual temperature is 30 F. The average annual precipitation at Nunam Iqua is 18 inches and the area has an average of 60 inches of snowfall per year. Prevailing wind directions are easterly or northerly in winter and westerly or southerly in summer. Sea is ice free from mid-June through October. Flooding occurs in the late fall. Hourly wind speed and direction data can be found at [http://yukon-watershed.org/Nunam\\_Iqua/station.html](http://yukon-watershed.org/Nunam_Iqua/station.html)

### 5.7 Flood

FEMA does not list a flood of record for Nunam Iqua, but does make note of a flood in 1972, in which water was reported to be about 1.5 feet deep in some areas of the community. Although these floodwaters covered much of the ground, no houses were

## Nunam Iqua Strategic Plan

reported flooded. Spring flooding caused by Yukon River ice jams and stream overflow is a hazard, however water depths during these floods are not great. The floodplain is extremely broad so that a large increase in flood flow results in a small increase in flood elevation, however there can be severe water damage to materials left on the river bank. The danger of fall flooding is significantly increased if ice is present. No FEMA flood hazard mapping is available for Nunam Iqua and the community does not participate in the National Flood Insurance Program. The Corps of Engineers established the 100-year flood elevation as 92.7 ft during a 1993 survey, using the grating at the front door of the Lower Yukon School District High School (which is at 14.3' Mean Sea level). The first floor of any building constructed would need to be elevated to 8 feet MSL to be the required 1" above the flood of record (the 1972 flood).

### **5.8 Fish and Wildlife**

Swan Lake holds tubesnout stickleback, blackfish, and immature burbot. The area is also host to Tundra Swans, White Fronted Geese, Cackling Canada Geese, Pintail, Mallard, and Green Wing Teal Ducks and Willow Ptarmigan. Eagles are a rare sight in the village. Red and white fox are seen near the village and village residents report occasional moose sightings. Migrating shore birds are seen along the nearby coastline in spring, but are not within the developed community in great concentrations.

Residents are active in subsistence activities. The more popular fur bearing animals used in clothing and handicrafts include the beaver, otter, muskrat, mink, and fox. Primary subsistence fish include whitefish, salmon, sheefish, lush, blackfish, bering cisco, tom cods, pike, herring, and smelts. Subsistence birds include geese, ptarmigan, ducks, swan, and crane. Subsistence land meat is primarily from Moose and rabbit; ocean meat from seal and whale. Residents pick berries including salmonberries, black berries, raspberries, and cranberries as well as five different kinds of greens. Labrador tea is picked on the tundra. See **Appendix E- Subsistence Resources**.

### **5.9 Threatened and Endangered Species**

A number of local projects technically lie within the breeding range of the threatened spectacled eider (*Somateria fischeri*); however, such projects are not likely to adversely affect this species, since local conditions within the project site do not provide suitable breeding habitat. Village residents report that spectacled eiders are a rare sight in the village.

## 6.0 POPULATION AND ECONOMY

### 6.1 Population Statistics

**Department of Commerce Community and Economic Development  
Certified 2005 Head Count Census Survey  
204 Residents**

Age bracket	Males	Females	Total
Under 18	53	44	97
18-39	35	27	62
40-59	12	15	27
60 and over	8	10	18
All ages	108	96	204

**Figure 7: Population Distribution**

**AVERAGE AGE= 23.54**

**48% of the population is under 18 years of age**

**53% Males and 47% Females**

**The potential workforce (18-64 years of age) is 97 residents**

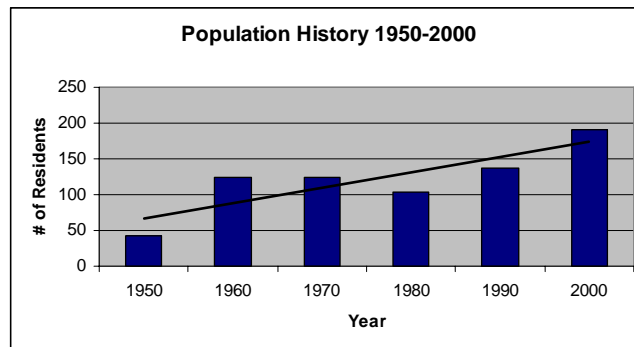
**Race:**

**93% Native American (190)**

**6 % White American (13)**

**1% African American (1)**

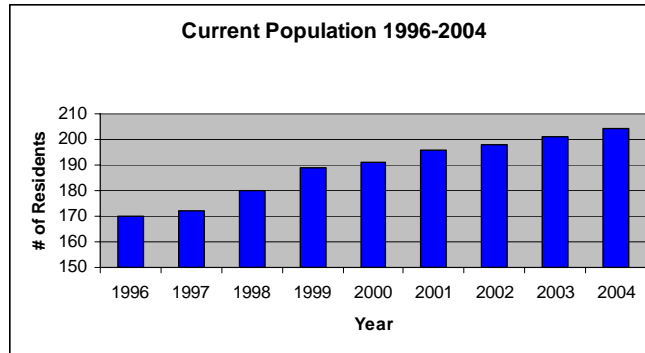
### 6.2 Population Forecast



**Figure 8: Historical Population Forecast**



## Nunam Iqua Strategic Plan



**Figure 9: Current Population Forecast**

Historical population increase 3.02%

Current Population increase is statistically 2.3%

With 9 births in 2004, the current growth is 4.61%

NOTE: Large families moving out of the village has the greatest effect on population statistics. The most common reason for moving is lack of adequate housing.

### 6.3 Income Levels

Listed below are select portions of the 2000 Census Data for Nunam Iqua. The median household income is \$29,000.

Income level	Number of Households
Less than \$10,000	7
\$10,000-\$24,999	8
\$25,000-\$49,999	12
\$50,000-\$100,000	9

**Figure 10: 2000 Income Levels**

### 6.4 Cost of Living Factors

#### 2004 Electricity:

- Residential rate is 35 cents/KWH (note: PCE averaged .1572 in 2004)
- Commercial rate: 45 cents/KWH first 2000 KWH, 35 cents/KWH after 2000 KWH
- Community Facilities rate: 15 cents/KWH

**Stove oil:** \$3.43/gallon

**Gas:** \$3.70/gallon

**Water:** \$ .11 per gallon at watering point/\$ .14 per gallon piped

**Washeteria:** \$4.00/lg. load wash, \$3.00/small load

\$1.00/15 min. large dryer; \$1.00/20 min. small dryer

\$4.00 shower/adult; \$2.50 1<sup>st</sup> to 8<sup>th</sup> grade children

**Wastehaul:** \$20/month

**Pick-up Trash:** \$5.00 for up to 2 pick-ups; \$10/month

**Commercial Dumpsite use:** \$50/month

**Low income housing payment:** minimum \$100/month

## 6.5 Composition of Employment

Employer	Part-time 20hrs/wk or less	Fulltime Over 20 hrs/wk	TOTAL JOBS
City	16	1	17
Tribe	5	4	9
YKHC	0	2	2
Corporation	2	0	2
Trading Post	2	2	4
LYSD-School	4	11	15
Airlines/DOT	4	0	4
Strongheart's Store	1	0	1
<b>TOTAL</b>	<b>34</b>	<b>19</b>	<b>53</b>

**Figure 11: Year round Employment**

Note: See **9.6 Employment Opportunities** for specific job titles

Seasonal jobs	Number
Commercial Fishing Permits	15
2004 City Capital Projects#W2s	20
Handicrafts	8
<b>TOTAL</b>	<b>43</b>

**Figure 12: Seasonal Employment**

Other Income	Number
Elected Officials (Stipends/Workshop wages)	17
Public Assistance	5
SS or SSI	10
Unemployed	8
<b>TOTAL</b>	<b>40</b>

**Figure 13: Other Income**

### Regional Economic Characteristics-Wade-Hampton Census Area:

There are 149 employers in the Census Area. The average monthly earning is \$1,475. The government sector provides 72 of such employers with an average monthly earning of \$1,452 while the private employers (77) provide an average monthly earning of \$1,532. In the private sector, retail trade is the largest employer (25) followed by construction (9). For more information see **Appendix H- Wade Hampton Census Area Economic Overview**.

### 6.6 Barriers to Development

- The loss of commercial fishing as the primary source of income for residents
- The excessive increase in the cost of fuel and subsequent increases in airfares and freight
- Weather which results in slow mail service and often affects meeting attendance
- Erosion and fall flooding
- Incomplete infrastructure will continue to be a barrier until essential services are completed in 2007 or 2008.
- The local decision that Bingo and Tourism have liabilities greater than the assets generated, even though they have proven to be a source of revenue in other small communities.

### 6.7 Potential for Growth

- Fisheries: There is a possibility that the high end market for King Salmon will revitalize the commercial salmon fishery. Deep sea fishing in the Bering Sea, near the coast, has yet to be developed. Halibut is part of the subsistence harvest in Scammon Bay and it is anticipated that there could be a potential fishery off the coast near Nunam Iqua. The Yukon Delta Fisheries Development Association has planned a Bering Cisco Feasibility Study that could open up additional white fish fisheries. Processing any fish locally would provide added-value.
- Wood Products- Drift logs from the Yukon River could potentially provide the raw material for a small saw mill. The greater reliance on stove oil has lessened the demand for wood as a heating source.
- Mining- Nunam Iqua is located in wetlands and all subsurface rights are owned by Calista, the regional Native non-profit. Sand bagging materials are available on nearby Munsen Island (see figure 6) that have been used to stabilize foundations. This is a potential source for material to fill lowlands.
- Tourism- As previously noted the community is not in support of tourism

## 7.0 EXISTING LAND USE

### 7.1 Land Status/Land Tenure

The Swan Lake Corporation is the principal surface landowner in the community. Other lands are leased or owned by the city, individuals, church, and State of Alaska. Subsurface rights are owned by Calista Corporation. Nunam Iqua lies within the Yukon Delta Wildlife Refuge.

### 7.2 14(c)(3) Lands Reconveyance Status

The Swan Lake Corporation has completed 14(c)(1) and is in the process of completing 14(c)(2). No land transfers have been made under 14(c)(3), though new deeds with the City are considered "a partial reconveyance measure until 14(c)(3) reconveyance can be accomplished".

### 7.3 Residential land use

There are 40 residential houses in Nunam Iqua. 27 AVCP/HUD houses are located in three residential subdivisions. Three houses are scheduled for construction in 2005 in

## Nunam Iqua Strategic Plan

residential subdivisions. There are 3 privately owned abandon buildings (still standing), plus various sauna, smokehouses, fish racks, and storage vans. For more information see 9.1.6 Housing.



Figure 14: Community and Utility Land Use Map 2004

### 7.4 School Land Use

6 school houses

4 school buildings

Construction of a new school has been funded and a lease agreement for the new site has been completed. After construction is completed in 2007, the school will keep only the teachers' housing and bulk fuel tanks at the current site. The grade school will be demolished and the high schools and land will revert back to the community.

### 7.5 Community Land Use

10 community buildings

3 major grave sites (See **Appendix F- Graveyard Location Map**)

Water sewer easements for the school and community facilities



### 7.6 Utility Land Use

UUI/GCI building, disks and poles  
Bulk Fuel Tank Farm  
Power lines easements

### 7.7 Economic Development Land Use

3 commercial buildings  
River bank gravel barge landing pad

### 7.8 Church Land Use

3 church owned buildings

### 7.9 Transportation Land Use

Airport runway and building  
Boardwalk easements  
A gravel road easement from the barge landing on the north side of the village to the community hall, across Swan Lake to the existing boardwalk system south of the new school site.

## 8.0 FUTURE LAND USE

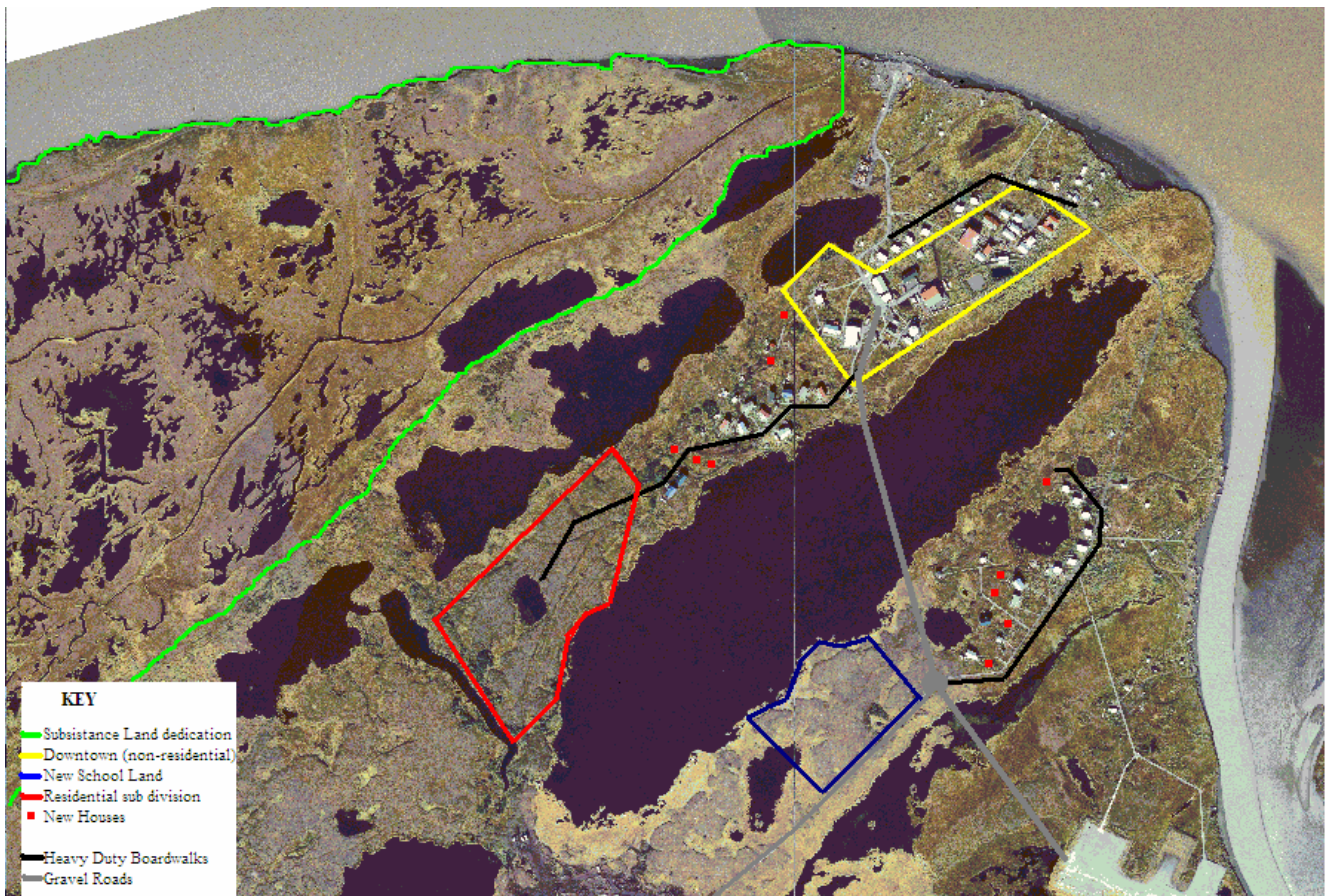


Figure 15: Future Land Use Map

### **8.1 Residential Future Land Use**

- 10 housing units over the next five years

### **8.2 School Future Land Use**

- a lease agreement for the new school site has been completed

### **8.3 City Government Future Land Use**

Land transfers would best be addressed by completing 14(c)(3). Current needs include:

- Easements for:
  1. Heavy duty boardwalks
  2. Airport to causeway gravel road
- Site control for:
  1. Public sauna
  2. Playground
  3. Fire department Code Red equipment

### **8.4 Utility Future Land Use**

As they are City owned and operated, land transfers would best be addressed by completing 14(c)(3). Current needs include:

- Easements for:
  1. water and sewer system;
  2. power line realignment
- Site control for:
  1. Wind generator
  2. Bulk Fuel Tank Farm expansion

### **8.5 Tribal Government Future Land Use**

Site control would be needed for the following projects:

1. Head Start/ preschool
2. Graveyard
3. Tribal Building
4. Day Care building

### **8.6 Economic Development Future Land use:**

1. Community based Fly out fishery/ice maker
2. Boat Harbor land based facilities
3. Airport Improvement Project (runway expansion)

## 9.0 EXISTING COMMUNITY BUILDINGS AND PROGRAMS

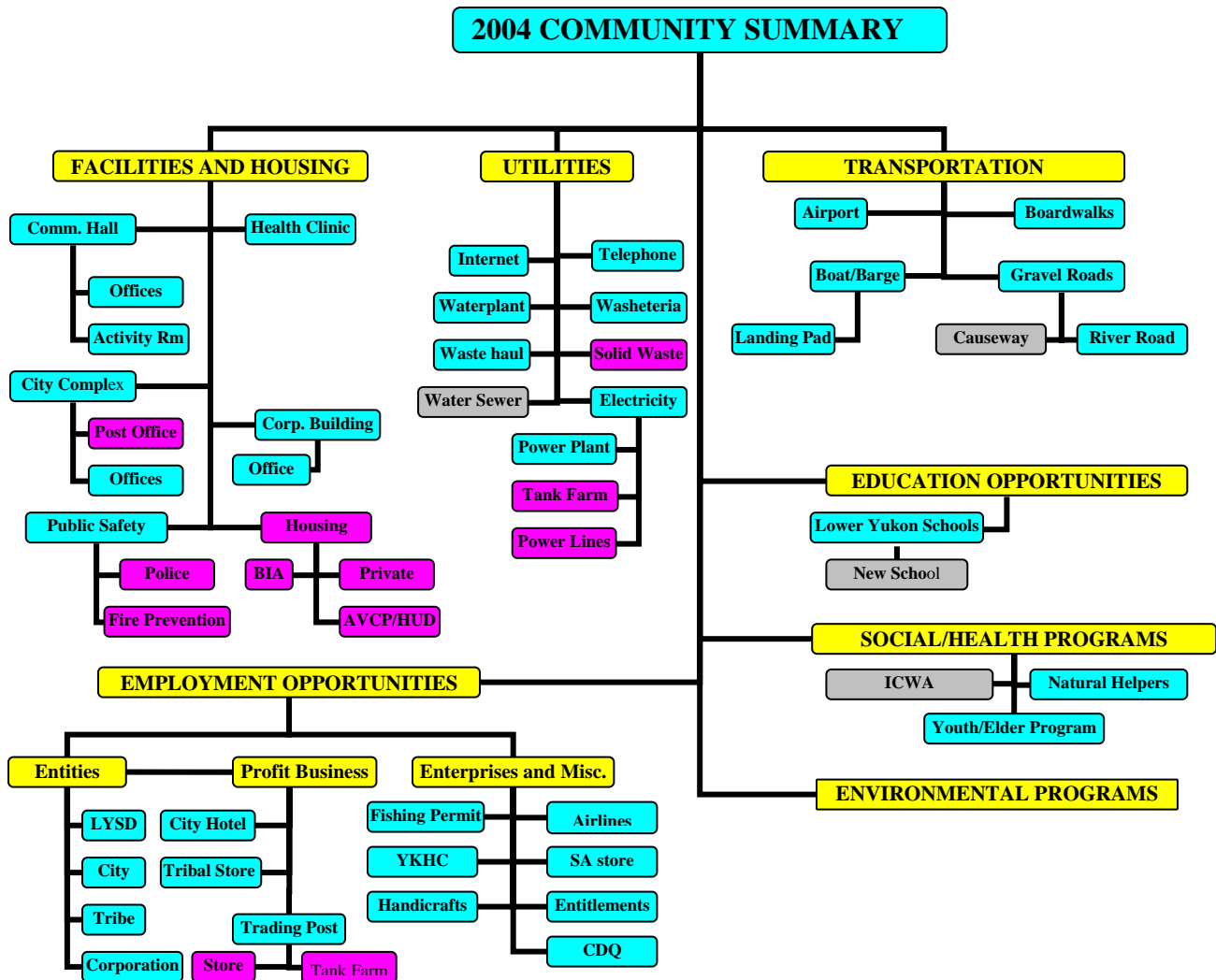


Figure 16: Existing Community Buildings and Programs Chart

- Blue is used for existing buildings and active programs.
- Grey indicates funded construction and programs that are not yet active.
- Pink indicates existing buildings or active programs that need improvement or additional assistance.

## Nunam Iqua Strategic Plan



Figure 17: Facilities and Utilities Photo

### 9.1 FACILITIES AND HOUSING

#### 9.1.1 Community Hall

The Tribal government owns and operates the Community Hall which is a stick-built building (66' X 40') on a piling foundation constructed in 1997. The building has running water, two bathrooms (7' X 6') with flush toilets, and a kitchen area (10' X 12') where concessions are sold.

##### 9.1.1.1 Tribal Office

The Tribal administration office is a renovated utility room (11' X 6') that overflows into a paneled wall clerical reception area (10' X 18'). Another office (11' X 6') is reserved for ICWA. The TANF clerk and current VISTA Librarian use the activity room, tables, and chairs for temporary offices. The Tribal Office phone number is (907) 498-4184; the Tribal Administrator's number is (907) 498-4186 and the fax (907) 498-4185. Office hours are 8:00AM-12:00PM, 1:00PM-5:00PM.

##### 9.1.1.2 Activity Room

The leftover open space (56' X 40') is adequate in size for small community gatherings, youth dances, and Eskimo dance practice. There are two sets of fold up bleachers, various wooden benches, chairs, and four tables that can be set up council or community meetings. The Community Hall is available for approved activities at \$40.00 per night.



## Nunam Iqua Strategic Plan

### **9.1.2 Health Clinic**

The Tribal government owns Health Clinic constructed in 2003 with Denali funds. The building was constructed with pre-fabricated insulated panels on a piling foundation. There is a reception area, public bathroom, an office, two exam rooms, and a dental facility. For itinerants there is a kitchen break room with refrigerator, sleeping facilities for 2 and a bathroom with shower facilities. The building is leased by the Yukon Kuskokwim Health Corporation which also operates the Pearl E. Johnson Sub-Regional Clinic in Emmonak, and the Yukon Kuskokwim Hospital in Bethel. Two Health Aides are employed by YKHC work at the Clinic which is open 9:00AM-4:00PM weekdays. One Health Aide is on call 24/7. Phone number (907) 498-4228 or 4229.

### **9.1.3 City Complex**

#### **9.1.3.1 Post Office**

The City operates the Post Office under a lease agreement with the United States government. The City renovated the front porch of an old freezer building (9' X 30') and installed post office boxes for letters and smaller items. Stamps and money orders are sold. The Post Office is open 10:00 AM-12:00PM; 1:00 PM-3:00 PM weekdays and 10:00 AM-12:00 PM on Saturday. Boxes must be picked up during working hours. Phone: (907) 498-4314.

#### **9.1.3.2 City and Utility Offices**

The City Complex is a renovated freezer facility with a post and pad foundation. The city owned and operated building is divided in half, the back room occupied by the City Office (13' X 20') and Advisory Planning Board Office. The front room is separated into a small public meeting space (12' X 16') and the Utility Board Office (8'X 16'). The City and Utility Board Offices can be reached at (907) 498-4226; Fax (907) 498-4250. Office hours are 9:00AM-4:00 PM.

### **9.1.4 Public Safety**

#### **9.1.4.1 Police**

The Public Safety Building (20' X 32') was constructed in 1992, on a post and pad foundation and is owned and operated by the City. The main office is used by the local Police Officer and visiting Alaska State Trooper. There is a separate room in the back of the building for the jail guard. There are two holding cells (6'X8') for prisoners. They have a small mattress and blanket. The connecting hallway has a monitor stove. There is no running water. Phone: (907) 498-4911; Fax (907) 498-4773. The Public Safety Department is staffed by Tribal employees.

#### **9.1.4.2 Fire Prevention**

The local Police Officer currently oversees the volunteer fire department using the Public Safety Building to store fire resistant coats, gloves, and hats. CO2 and N. Dex extinguishers have been placed at the Bulk Fuel Tank Farm. Other available fire equipment consists of a 2,100 foot house, a 450 foot hose and 5 hp water pump

## Nunam Iqua Strategic Plan

stored in the waterplant. All AVCP homes are issued fire extinguishers. Fire Alarms are in all of the public building and most private residences.

### 9.1.5 Corporation Building

Constructed in 1982, the Corporation Building (40'X 60') is stick-built on a pad and post foundation. The front two thirds of the building was been used as storage space, though some renovation was started and a restaurant counter built.

#### 9.1.5.1 Corporation Office

The Corporation office is located in the back third of the building. The Corporation Office phone number is (907) 498-4627; Fax (907) 498-4242. Office hours are 9:00AM-12:00PM and 1:00PM-3:00PM



Figure 18: Housing Photo

### 9.1.6 Housing

There are currently 46 houses in Nunam Iqua: 14 houses are on the south side of Swan Lake and 32 houses are on the north side. There is no group housing.

- 27 built through AVCP/HUD Program
  - a. 13 houses were constructed in 1979
  - b. 9 houses were constructed in 1994
  - c. 5 houses were constructed in 2001

## Nunam Iqua Strategic Plan

- 4 built through the BIA Program
  - a. 2 houses in 1987
  - b. 2 houses in 1997
- 6 owned by the Lower Yukon School District (includes 1 apartment)
- 2 owner financed
- 2 purchased (Corp and City sold buildings)
- 5 constructed prior to 1979

Of the 46 house, four are unoccupied:

- One is being renovated by AVCP
- One is not insulated
- Two houses are empty with the one owner in school and the other recently moved.

There are two abandoned buildings on the south side of the lake, no longer suitable for habitation.

### **Housing projects for 2005:**

2 houses are funded for construction by AVCP/HUD

1 new house is funded for construction by BIA

Applications for BIA and AVCP/HUD houses are handled by the Tribal government which is currently compacted with AVCP HA. The number of HUD houses awarded is based on number of eligible applicants. Eligibility is determined by AVCP.

### **Statistics**

Average number of bedrooms per household: 2.5

Average household size is statistically 5.33 persons

Average number of generations per household: **2.25**

Note: These statistics do not include Lower Yukon School housing.

## **9.2 UTILITIES**

### **9.2.1 Telephone and Internet**

GCI (1-800-800-4800) and Unicom (1-800-478-2020) provide local and long distance telephone. Unicom offers a 56kps internet service and GCI offers the same as well as high speed internet service.

### **9.2.2 Waterplant**

Completed in 2001, the Waterplant is in a (66' X 70') City owned metal building on a gravel pad foundation. Water is pumped from the river, processed using the Flocculation/Sedimentation/Filtration method, as described in the 1998 Nunam Iqua Water Sewer Improvement Plan (See **Appendix H**). Treated water is stored in a 212,000 gallon insulated water tank for distribution. Currently piped water is provided via lift stations to the Community Hall, Hotel, Washeteria, Clinic, and the Lower Yukon School District Sheldon Point Schools. Residents use a coin operated watering point. Hot water can be purchased in the Washeteria. The Waterplant uses excess heat from the nearby power plant, and has two boilers fueled from an 8,000 gallon doubled walled fuel tank

## Nunam Iqua Strategic Plan

filled from a pipeline to the Bulk Fuel Tank Farm. There is a laboratory office, employee bathroom and chemical storage closet. A second floor above the washeteria is accessible from the waterplant for additional storage. The Waterplant phone number is (907)-498-4869.

The facility was constructed to accommodate a community-wide above ground circulating looped water system and a vacuum sewer system. With forced account construction and assistance from the Alaska Native Tribal Health Consortium (ANTHC), the piping is scheduled for completion in 2008. The old waterplant building (40' X 30'), stick built on pilings is located on school property was emptied to use for storage.

### **9.2.3 Washeteria**

Located in the same metal building as the Waterplant is the Washeteria (47' X 36') owned and operated by the City. An office (8.5' X 8') houses an attendant who assists in coin operation of the eight washers, seven propane dryers, and an extractor. There are bathing facilities. The men's side has three showers, one toilet and two urinals; the woman's side has three showers, two toilets, and a bathtub, stalls on the facilities for men and women, plus one bathtub. Hours change based on demand. The attendant sells detergent, bleach, laundry bags and various concessions.

### **9.2.4 Wastehaul**

Since 1989, the City has operated a honey bucket wastehaul service. Sewage is carried in 5 gallon buckets from the houses and emptied into 80 gallon collection bins. Winter season, two operators place the bins on a sled and tow them by snow machine to a remote fenced lagoon. Frozen sewage pops out of the container when hit by a plastic mallet. In the summer, bins are moved on a trailer by a four wheeler ATV on a boardwalk to the lagoon. Although plastic bag liners used by residents limit spillage, the bags pollute the lagoon. Each household is billed for the service. Non-payment is hard to enforce. Operators get to take free showers and wash clothes, as their working conditions are not sanitary. Equipment is stored in a 20 foot van next to the City Complex.

### **9.2.5 Solid Waste**

The solid waste dump is a Class 3 landfill owned by the City. A circular fence with a circumference of approx. 900 feet surrounds the designated area and is connected to the boardwalk by a gravel path. Trash can be delivered at any time. The school and stores are charged a monthly user fee as well as residents when the City transports the trash to the solid waste dump. In the winter, most residents use their own snow machines. Maintenance consists of using city owned heavy equipment to centralize the trash.

### **9.2.6 Water/Sewer**

Community wide water/sewer is under construction with funding secured. Phase one was construction of the waterplant, washeteria, water tank, and raw intake line. Phase two was lagoon construction, which was started in the spring of 2004 and is anticipated to be completed in the spring of 2006. The Causeway crossing Swan Lake for support of the water/sewer utilidor is under construction. Water/Sewer system design has been contracted. Community residents are currently scheduled to have running water and

## Nunam Iqua Strategic Plan

flush toilets by 2007 or early 2008. For more details of the selected system, see **Appendix H- Nunam Iqua Water/Sewer Improvement Plan 1998.**

### 9.2.7 Nunam Iqua Electric Company (NIEC)

Owned and operated by the City of Nunam Iqua since 1985, the power plant now occupies a stick-built building (20' X 32') on a pile foundation built in 1992. An upgrade of the plant, completed in December 2002, installed a new John Deere 6081A 200 KWH generator, new switching gear, and hardwired a new 12,000 gallon double walled intermediate storage tank located on a gravel pad foundation nearby. A new John Deere 6125A 250 KWH generator was purchased in 2004.

Fuel is piped to the intermediate tank from the Bulk Fuel Tank Farm owned by the City of Nunam Iqua and shared with Swan Lake Corporation. The facility contains two separate cells, each with a secondary containment liner covered in gravel and fenced. The City portion (43' X 50') has five NIEC tanks with a total capacity of 49,000 gallons. The Swan Lake Corporation portion (50' X 50') has two stove oil storage tanks with 15,300 gallons capacity, and two gasoline storage tanks with 20,600 gallons and two 5,300 gallon dispensing tank, one for each fuel. All tanks are single walled and filled by a connection to the marine header used in off loading fuel from the barge landing.

Electrical distribution lines are on telephone poles with strategically placed transformers. Poor soil foundation, high winds, and high snow drifts necessitate regular maintenance of poles and transformers.



**Figure 19: Tank Farm and Transportation Photo**



### **9.3 TRANSPORTATION**

#### **9.3.1 Boat/Barge**

Nunam Iqua sits at the mouth of the Yukon River where Kwemeluk Pass runs to the Bering Sea. This location affords access by boat and barge approximately five months per year. Private skiffs are used for inter-village transportation and as commercial fishing boats. Boats are stored on river bank in preparation for freeze-up. Crowley (1-800-248-8632) and Yutana Barge Lines (1-800-478-5476) have Nunam Iqua on their spring and fall schedules.

##### **9.3.1.1 Barge Landing Pad**

Major barge lines dock at a Corporation owned gravel pad (120' X 120') to make deliveries of bulk supplies and to connect to the City Tank Farm for fuel delivery.

#### **9.3.2 Airport**

The community maintains a year-round lighted airport oriented 26 degrees 39' 50" W of True North. The dimensions are 60' x 3015', within a 120' x 3495' Safety area. Charter or scheduled flights are available to Nunam Iqua from Anchorage, Bethel or St. Mary's via Grant Aviation (1-800-478-1944), and Hageland Aviation (1-800-478-2245). Freight from Anchorage comes by-pass mail or on Northern Air Cargo (1-800-478-3330) to Emmonak and Arctic Transport Service ((907) 949-1337) to Nunam Iqua.

According to the *Yukon-Kuskokwim Delta Transportation Study-An Element of the Alaska Statewide Transportation Plan*-the number of village to village air travel (trips) for Nunam Iqua has dramatically increased from 1990 (268 trips) to 2000 (1,843 trips). Moreover the study projections expect 2,000 trips by 2005 and as much as 3,500 trips by 2020. Strong winds and/or blowing snow can render Nunam Iqua inaccessible by air for several days at a time during fall and winter. An active weather station maintained by the Depart. of Transportation at [http://yukon-watershed.org/Nunam\\_Iqua/station.html](http://yukon-watershed.org/Nunam_Iqua/station.html). See **Appendix F**- Airport Improvement 2005 proposed expansion of the existing runway.

#### **9.3.3 Boardwalks**

Because of soft marshy ground ATV four wheeler travel within the community is generally limited to approximately 2.3 miles of 6 foot wide and 8 foot wide wooden boardwalk. The majority were constructed in 1990 with treated 2" X 6" X 16 lumber on a foundation. Subsequent housing projects have added some heavy duty boardwalk sections as well as sections built with untreated wood. An inventory of all boardwalks will be completed by June 30, 2006. Residents use snow machines for local travel during the winter.

#### **9.3.4 Gravel Roads**

##### **9.3.4.1 River Road**

A 12' wide gravel road was constructed in 1998 running 1425 feet, from the river bank barge landing pad to the Community Hall, Hotel, Waterplant, and Clinic.

### **9.3.5 Causeway**

The causeway will be a 20 foot wide gravel road crossing Swan Lake, connecting the north and south sides of the village. There is an approach (on the north side of the village from the existing gravel road in front of the community hall to Swan Lake), a 740 foot lake crossing, and another causeway approach (connecting to the existing boardwalk system on the south side of the village) for a total of 1,700 feet of road. Funding was secured and construction began September 2005. All gravel should be in place by spring 2006. See **Appendix H-** Causeway Feasibility Study 2002 and Causeway Conceptual Plan 2005.

## **9.4 EDUCATIONAL OPPORTUNITIES**

### **9.4.1 Lower Yukon School District (LYSD)**

Education: The Lower Yukon School District (LYSD) Sheldon Point Schools provide primary and secondary education with no grading system. The old Carnegie system was replaced by the Lower Yukon School Model developed from the Quality School Model (QSM). All mandatory State testing is done using a graduated system that should level out by 2008. High school students must pass the state qualifying exam to graduate. All ages have access to computers.

There are 65 students registered in 2005/6 with 5 teachers and 3 teacher's aides. Levels are grouped in three separate classrooms: Kindergarten and first level; second to fifth level together; sixth to eighth level. The high school classroom has ninth through twelfth. Extracurricular activities include cross country track, Native Youth Olympics, boys and girls basket ball and volley ball.

Two of the classrooms were built by BIA in 1964 and will be torn down once the new school is constructed. A classroom constructed in 2002 will be converted into future teachers housing. The high school (60' X 72'), which was built in 1980, has a classroom (23' X 43'), a gym (29' X 58'), and computer room (8' X 16') for student use, as well as kitchen and offices. Heating is from boilers with one back-up forced air furnace in the high school. Single phased electricity is provided by the Nunam Iqua Electric Company, although there is a 150KWH back-up generator on site. Fuel is stored in two 20,000 gallon double walled bulk tanks with a 1,000 gallon transfer tank. They are filled by barge from a marine header on the river bank (650 feet east of the city marine header).

#### **9.4.1.1 New School**

The new school has been designed by USKH (Steve Keller 452-2128). Construction was funded in FY06 by the Alaska Legislature. Further information is available from Karen Goodwin, Lower Yukon School District Business Manager  
[kgoodwin@do.lysd.k12.ak.us](mailto:kgoodwin@do.lysd.k12.ak.us).

## **9.5 SOCIAL/HEALTH PROGRAMS**

### **9.5.1 Indian Child Welfare Act**

The Indian Child Welfare Act (ICWA) is a federal law which regulates placement proceedings involving Indian children. Any child that is a member of a tribe, or eligible

## Nunam Iqua Strategic Plan

for membership in a tribe, has the right to protection under the ICWA. These rights apply to any child protective case, adoption, guardianships, termination of parental rights action, runaway/truancy matter, or voluntary placement of your children. The ICWA fulltime caseworker has an office in the Community Hall open 9:00AM-12:00PM, 1:00PM-5:00PM. The phone number is (907) 498-4183.

### **9.5.2 Natural Helpers**

Natural Helpers is a program supported by the Lower Yukon School District where students provide peer support on substance abuse prevention and suicide prevention. Classes are held on Fetal Alcohol Syndrome and Fetal Alcohol Effects. Natural Helpers serve as positive role models for younger students.

### **9.5.3 Youth/Elder Program**

This program, funded through the Department of Health and Social Services suicide prevention program, will begin in September 2005. The goal is to build resiliency and connectedness with the community youth. Activities are planned that will bring youth and community members together. The office is in the Tribal Community Hall. The Prevention program is overseen by the Nunam Iqua Advisory Planning Board.

## **9.6 EMPLOYMENT OPPORTUNITIES**

### **9.6.1 Local Entities**

The Lower Yukon School District, the Nunam Iqua Traditional Council, the City of Nunam Iqua, and the Swan Lake Corporation currently have 41 positions of employment.

#### **9.6.1.1 Lower Yukon School District**

- *Principal*
- *K-1 teacher*
- *Grade 2-5 teacher*
- *Grade 6-8 teacher*
- *High school teacher*
- *Special Education teacher*
- *Librarian*
- *Secretary*
- *Maintenance*
- *Janitor*
- *Cook*
- *Assistant Cook*
- *3 Teacher's Aides*

#### **9.6.1.2 City of Nunam Iqua**

- *Administrator*
- *Utility Manager*
- *Planning Board Clerk*
- *Post Office Clerk*
- *Janitor*
- *Building Maintenance worker*
- *Wastehaul Operator*
- *Wastehaul Operator assistant*
- *4 Washeteria Attendants*
- *2 Waterplant Operators)*
- *Trash Operator*
- *Power Plant Operator*
- *Power Plant Operator Altn.*



## Nunam Iqua Strategic Plan

### 9.6.1.3 Nunam Iqua Traditional Council

- Tribal Administrator
- Secretary/Bookkeeper
- Community Hall Maintenance
- ICWA administrator
- Clinic Maintenance worker
- VISTA Librarian
- TANF Case Manager
- Village Police Officer
- Nunam Iqua Youth Program Facilitator

### 9.6.1.4 Swan Lake Corporation

- Corporation Manager
- Land Planner



Figure 20: Stores and Hotel Photo

## 9.6.2 Local Entities Profit Business

### 9.6.2.1 City Hotel

The City Office uses the janitor and building maintenance worker to operate a five bedroom hotel. The modular building (30' X 35') has five bedrooms (9' X 7') with one twin bed each. The hallway has a platform that can be pulled down for another sleeping space. There is a kitchen with stove, refrigerator, microwave, running water, and a dining room with table and couch. There is a small office space and a bathroom with a toilet, shower, washer and dryer. The Hotel rental policy is \$75/night/person. Group rate is \$60/night for four people; \$50/night for more than four. Rooms can be rented by the

## Nunam Iqua Strategic Plan

month for \$1250/person. Anyone staying in the hotel is required to be signed in on the sign up sheet provided. Reservations are made by calling the City Office at (907) 498-4226. The hotel is maintained by various City employees.

### **9.6.2.2 Tribal Store**

The Tribal Store (10' X 12') is adjacent to the Activity Room inside the Community Hall. There is a refrigerator, microwave, running water, coffee pot, and popcorn machine. Pop, candy, microwave sandwiches, and various other concessions are sold when the Community Hall is open during Tribal Office hours and community activities. Various Tribal employees work and manage the store.

### **9.6.2.3 Nunam Iqua Trading Post**

The Swan Lake Corporation operates the Nunam Iqua Trading Post. An insulated metal building (50' X 80') with a walk in freezer (10' X 30'), an office (10' X 20') and a back storage room (50' X 10'). The store stocks hardware, clothing, furniture, and groceries. Supplies are flown into the community.

- *Nunam Iqua Trading Post Manager*
- *2 NITP weekday Clerks*
- *2 NITP weekend clerks*

## **9.6.3 Enterprises and Miscellaneous**

### **9.6.3.1 Commercial Fishing**

The schedule is regulated by Alaska Fish and Game (907) 949-1320. Depending on the run strength of King Salmon and spring chum, the season usually is open around the middle of June with two periods a week. The fall season for fall chum and Coho opens in August with a similar schedule. Declining salmon stock has severely restricted hours and decreased local incomes. Prices vary. There are currently two buyers in the area. Bering Sea Fisheries (907) 949-1513 and Kwik'pak Fisheries (907) 949-1120.

- *15 Lower Yukon Commercial Salmon Permits are registered in Nunam Iqua*

### **9.6.3.2 YKHC**

The Yukon Kuskokwim Health Consortium (YKHC) leases the Tribal Clinic building. YKHC is responsible for the training and staffing of the health care professionals.

- *2 Health Aides*

### **9.6.3.3 Airlines**

- *Airport Maintenance contract worker*
- *Arctic Transportation Service Agent*
- *Hageland Airline Agent*
- *Grant Aviation Agent*

### **9.6.2.4 Strongheart's Associates Store**

This is a privately owned store that stocks candy, pop, some groceries, and miscellaneous items. Hours are usually in the evening. For more information call (907) 498-4213.

- *Store Clerk*

### 9.6.2.5 Handicrafts

Handicrafts are a source of income. Residents carve ivory; make dance fans and traditional hunting tools, as well as sleds. Some knit, crochet, sew material or furs to make hats, gloves, blankets, and kaspag. Some items for sale are shown at the Nunam Iqua Trading Post.

- *8 Residents reported income from handicrafts*

### 9.6.2.6 Entitlements

- *10 Residents are retired or on disability*
- *5 Families are on public assistance.*

### 9.6.2.7 CDQ

The Community Development Quota Program (CDQ) is a fishery management system divided into groups based on location. Nunam Iqua belongs to the Yukon Delta Fisheries Development Association (YDFDA), a self-sustaining, independent fishing company whose purpose is to create income and employment opportunities in the high seas fisheries for Yukon Delta residents as well as offer scholarships and training. Work is seasonal and all community residents are eligible to apply. Drug testing is mandatory. The City Office (907) 498-4226 is the village CDQ representative. Doug Redfox in Emmonak (907) 949-1202 is the supervisor. YDFDA website is: [www.cdqdb.org/groups/yd/ydhome.htm](http://www.cdqdb.org/groups/yd/ydhome.htm).

- *Two elected representatives serve on the YDFDA board.*
- *Any interested resident*

## 10.0 STRATEGIC IMPROVEMENT PLAN

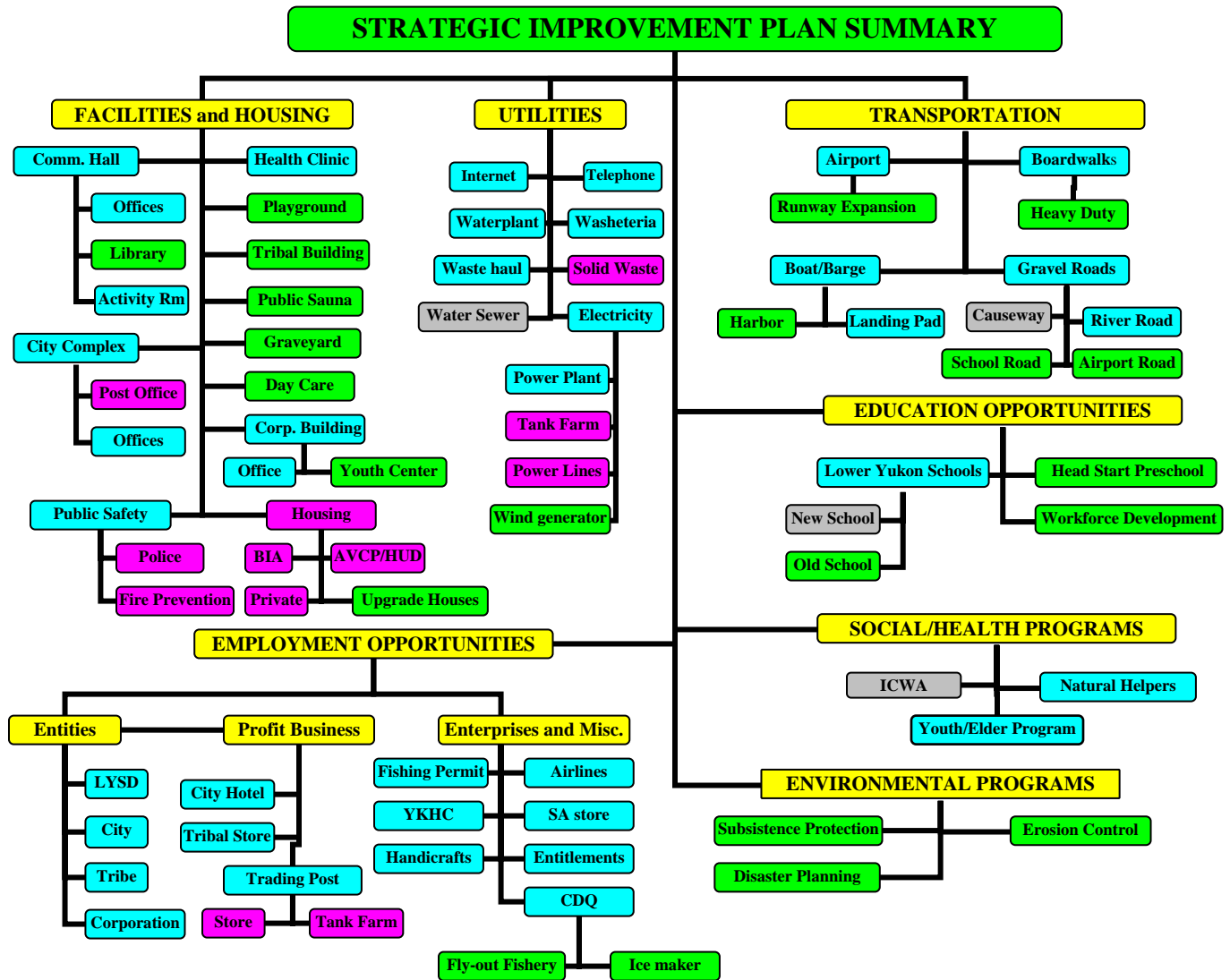


Figure 21: Strategic Plan Summary Chart

The community of Nunam Iqua has been divided into 7 components and is color coded.

- Blue is used for existing buildings and active programs.
- Grey indicates funded construction and programs that are not yet active.
- Pink indicates existing buildings or active programs that need improvement or additional assistance.
- Green identifies planned capital improvement projects or programs

## 10.1 PROJECTS AND PROGRAMS THAT NEED ASSISTANCE

### 10.1.1 Water Sewer:

- **Potential Problem:** The Nunam Iqua residential homes lack running water and flush toilets. Although most of the construction has been funded, there could be budget problems due to increases in the cost of fuel, workers compensation, wood, and steel. These increases were not anticipated in the original cost estimates. Also not included in the original scope of project, were eight houses: Five AVCP houses were built in 2002; one BIA and two AVCP houses are scheduled for construction in 2005.
- **Solution:** Include the additional houses in the project scope and secure funding to complete the community-wide water sewer project in 2005 dollars.
- **Action:**
  1. Complete new lagoon (begun in 2004) and close out old lagoon
  2. Construct a sanitation causeway across Swan Lake
  3. Update the Nunam Iqua Water Sewer Master Plan and complete Water and Sewer System Design
  4. Secure utility right of way; include in 14(c) 3 land request
  5. Develop funding strategy and secure additional funds
  6. Update Utilities Business Plan
  7. Install vacuum package, water sewer distribution mains, vacuum sewer mains, water and sewer service lines and in-house plumbing
  8. Implement Utilities Business Plan
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Alaska Native Tribal Health Corporation (Current Project Lead Agency): Contact: Pierre Costello: 1-800-560-8637 ext. 3534
  2. Department of Environmental Conservation-Safe Water Division (Current Project Lead Agency) Contact: Greg Magee , Program Manager 269-7613
  3. Denali Commission (Note Denali Commission often provides funds to other agencies and does not directly oversee projects). 271-1414

### 10.1.2 Housing

- **Problem:** There is a lack of adequate housing to meet local needs as well as those individuals and families wanting to move to Nunam Iqua. There is also a lack of awareness of the rural housing programs that address this issue. Lack of housing affects economic efficiency in utility development: An inadequate number of homes will increase the residential cost of user fees for the water sewer system under construction.
- **Solution:** Increase awareness of relevant housing programs and provide assistance for potential homeowners. Build more houses in Nunam Iqua to meet the need and to insure that the water sewer utility can operate at affordable rates.
- **Action:**
  1. Research the possibilities for community housing for residents

## Nunam Iqua Strategic Plan

2. Insure that the Nunam Iqua Tribal Council accesses available HUD funds for local construction.
  3. Provide information on options and assist residents with applications.
- **Lead Responsibility:** Tribal Government
  - **Possible Funding Sources:**
    1. AVCP Housing: 543-3121 (toll free) 1-800-478-4687
    2. USDA Rural Housing Service: 761-7700 USDA's Rural Housing Service offers a variety of loan packages for homeowners, developers, and lenders. These may be used in conjunction with the Tribe's Housing Authority programs.
    3. Rasmussen Foundation: 297-2700. The Foundation provides a series of grants for small community development.

### 10.1.3 Post Office

- **Problem:** The City of Nunam Iqua has the post office contract. The facility is a renovated front porch of an old freezer building that is poorly insulated and too small. Periodically incoming mail overflows into the back porch.
- **Solution:** Develop or relocate to a more functional and efficient facility to provide Post Office services.
- **Action:**
  1. Develop a plan to either insulate and expand the current site or move to another building
  2. Promote local revenue increases with increased space
  3. Apply for a Federal Post Office
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540 Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation.  
[http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.1.4 Police

- **Problem:** The Public Safety building post and pad foundation has shifted and caused considerable interior damage. Linoleum and flooring are rotten and one wall has fire damage. Additional problems during construction included completing the sheet rocking before the electrical wires arrived, so they had to be placed externally.
- **Solution:** A new Public Safety Building
- **Action:**

## Nunam Iqua Strategic Plan

1. Community consensus of location
  2. Research packaged designs and cost estimates
  3. Determine funding strategy for construction
  4. Secure site control and necessary construction permits
  5. Secure Funding
  6. Construct with maximum local hire
- **Lead Responsibility:** Tribal government
  - **Possible Funding Sources:**
    1. Multi-Use Facility Program 269-4500 Contact: Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the police service with other community needs such as recreation and postal services.  
[http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
    2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.1.5 Fire Prevention

- **Problem:** In a fire in 1997. The City lost the washeteria as well as \$8,000 worth of materials needed for construction of the Community Hall. There was a lack of adequate equipment or trained personnel to deal with the crisis. Since then, the City has purchased several fire extinguishers, fire proof clothing, and has submitted an application for Code Red (which has not been funded to date). The Village Police Officer has gone to training, however if there was a fire, the ability to respond remains limited.
- **Solution:** Obtain more equipment and training to adequately respond to a fire.
- **Action:**
  1. Continue to seek Code Red funding
  2. Organize and register Volunteer Fire Department
  3. Get site control for Fire Prevention station
  4. Secure funding for vehicles
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.

### 10.1.6 Solid Waste

- **Problem:** The dumpsite is a fenced area on the tundra. Lack of oversight has led to incomplete burning and trash deposits outside of the fenced area, blocking access. Although there is some funding for an upgrade, there is no community solid waste management plan to insure cost effective results.



## Nunam Iqua Strategic Plan

- **Solution:** Develop a community solid waste management plan, design and build the facility
- **Action:**
  1. Secure funding to develop a community solid waste management plan
  2. Research options and decide on a method of disposal with viable operation and maintenance plan
  3. Seek community support for method and site
  4. Get site control
  5. Develop funding strategy for construction
  6. Secure funds and necessary permits
  7. Build the facility
  8. Implement the operation and maintenance plan
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Alaska Native Health Board/Environmental Protection Agency Region 10/Alaska Integrated Waste Management Planning Grants/Grants for Tribes in Alaska. The Alaska Native Health Board funds Integrated Waste Management Plans. \$2,000 to \$12,000 in grant money will be awarded through a competitive process to approximately 7 to 11 Alaska Native Tribes in the year 2005 for locally developed Integrated Waste Management Plans for their communities.
  2. Department of Environmental Conservation-Landfill Site Analysis Program. Contact: Lorie Adrich 269-7624. The program purpose is to provide communities assistance with an in-house preliminary landfill site analysis.
  3. Denali Commission Land Fill Program. This funding provides the Denali Commission and its partner organizations an opportunity to identify innovative solutions to technical and logistical challenges of traditional handling of municipal solid waste (MSW). Due to remote location, climatic challenge, ground water and freeze/thaw conditions, as well as local municipal budget limitations, this is one of the most underserved arenas in Alaska's environmental and public health fields. The Denali Commission is authorized to conduct pilot projects incorporating emerging technologies to improve local management options. Contact: Cindy Roberts 271-1414

### 10.1.7 Tank Farm

- **Problem:** The Alaska Energy Authority supports the need for construction of a new larger facility. The existing facility, which is documented in the 2001 Bulk Fuel Upgrade report and again in 2004, has problems and is inadequate.
- **Solution:** Construct a new tank farm
- **Action:**
  1. Maintain contact with AIDEA on funding timeline
  2. Research and secure matching funds to accelerate grant offer
  3. Get site control and necessary construction permits
  4. Seek forced account construction



## Nunam Iqua Strategic Plan

5. Construct tank farm utilizing maximum local hire
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Bulk Fuel System Upgrades – *Alaska Energy Authority* - substantial contributions from the Denali Commission, the bulk fuel upgrades program provides funding for the design/engineering, business planning and construction management services to build code-compliant bulk fuel tank farms in rural communities. <http://www.aidea.org/bulkfuel.htm>
  2. Power Plant Loan Fund– *Alaska Energy Authority* - Provides loans to local utilities, local governments or independent power producers for the development or upgrade of electric power facilities, including conservation, bulk fuel storage, and waste energy conservation, or potable water supply projects. <http://www.aidea.org/powerloan.htm>

### 10.1.8 Power Lines

- **Problem:** All untreated poles placed in service in 1985, have become rotten and need to be replaced. Power lines connecting the north and south sides of the village need to be rerouted due to the erosion on the north end of Swan Lake.
- **Solution:** Replace all untreated poles and reroute the power lines connecting the north and south sides of the village.
- **Action:**
  1. Determine the number of poles needing replacement
  2. Plan power line routes that will meet future needs
  3. Determine ROW land requirements and cost estimate for construction
  4. Develop funding strategy
  5. Secure funding and necessary permits
  6. Construct with maximum local hire
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. **Community Assistance** – *Alaska Energy Authority* - A wide variety of resources must be tapped to develop successful tank farms and electrical projects. AEA provides resources to communities to enable them to make informed decisions regarding their future and infrastructure needs. <http://www.aidea.org/techasst.htm>
  2. **Power Project Loan Fund** – *Alaska Energy Authority* - Provides loans to local utilities, local governments or independent power producers for the development or upgrade of electric power facilities, including conservation, bulk fuel storage, and waste energy conservation, or potable water supply projects. <http://www.aidea.org/powerloan.htm>

### 10.1.9 NITP Store

- **Problem:** High turnover in the manager position has caused the Nunam Iqua Trading Post (NITP) to suffer financial loss. Stove oil fuel tanks were empty by March, 2005. Due to the financial status, there are few groceries available for purchase. The need for residents to travel upriver for stove oil and food supplies has increased the local cost of living and their ability to pay other bills.

## Nunam Iqua Strategic Plan

- **Solution:** Small business training assistance for the manager. A business plan for the store and a locally applicable handbook on how to operate a retail store.
- **Action:**
  1. Research successful retail operation in rural communities
  2. Partner with a program that will provide manager training
  3. Develop a business plan for NITP and local operation handbook
- **Lead Responsibility:** Swan Lake Corporation
- **Possible Funding Sources:**
  1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  2. Iqalliarvik Economic Development Corporation (IEDC) and Yukon Delta Fisheries Development Association (YDFDA) whose purpose is to create income and employment opportunities in the high seas fisheries for Yukon Delta residents as well as offer scholarships and training. Deborah Vo 1-877-644-0326.

### 10.1.10 NITP Tank Farm

- **Problem:** The computerized fuel dispenser has never worked successfully, as there is no one locally who can keep it operational. Currently un-metered fuel must be sold by filling 5 gallon containers. The dispenser location blocks the gravel road traffic and is subject to flooding. The capacity of the tank farm is too small for future needs and there is no room for additional bulk storage tanks. NITP employees do not have Hazmat training.
- **Solution:** A new dispensing system and site. A larger capacity bulk fuel tank farm.
- **Action:**
  1. Research successful dispenser systems in Alakanuk and Emmonak
  2. Develop business plan that will cover cost of new dispenser
  3. Find available trainings and funding for employees.
  4. Work with the City on the New Tank Farm Project
- **Lead Responsibility:** Swan Lake Corporation
- **Possible Funding Sources:**
  1. Community Assistance – Alaska Energy Authority - A wide variety of resources must be tapped to develop successful tank farms and electrical projects. AEA provides resources to communities to enable them to make informed decisions regarding their future and infrastructure needs. <http://www.aidea.org/techasst.htm>
  2. Power Project Loan Fund – Alaska Energy Authority - Provides loans to local utilities, local governments or independent power producers for the development or upgrade of electric power facilities, including conservation, bulk fuel storage, and waste energy conservation, or potable water supply projects. <http://www.aidea.org/powerloan.htm>
  3. Iqalliarvik Economic Development Corporation (IEDC) and Yukon Delta Fisheries Development Association (YDFDA) whose purpose is to create income and employment opportunities in the high seas

## Nunam Iqua Strategic Plan

fisheries for Yukon Delta residents as well as offer scholarships and training. Deborah Vo 1-877-644-0326.

### 10.2 NEW FACILITIES AND HOUSING PROJECTS

#### 10.2.1 Tribal Building:

- **Issue:** The community hall building is too small for gatherings that include other communities. The activity area has been decreased with the need for additional office space to provide residents with basic tribal services and social programs.
- **Approach:** Use the community Hall for office space and build a larger facility for group gatherings.
- **Action:**
  1. Community consensus of location
  2. Develop cost effective generalized design
  3. Develop a business plan to cover operation and maintenance expenses
  4. Plan funding strategy for construction
  5. Confirm site control
  6. Secure Funding and necessary permits
  7. Finalize design and construct with maximum local hire
  8. Implement business plan
- **Lead Responsibility:** Tribal Government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation. [http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

#### 10.2.2 Playground

- **Issue:** No adequate outdoor activity facility for youth. Suggestions include a basket ball court and bike park.
- **Approach:** To construct of a facility that meets the needs of youth of all ages, and provides them with a safe place to play.
- **Action:**
  1. Community consensus of location and lot size
  2. Develop cost effective generalized design
  3. Determine operation and maintenance costs
  4. Plan construction funding strategy (single or multi-phased)
  5. Confirm site control
  6. Secure Funding and necessary permits

## Nunam Iqua Strategic Plan

7. Finalize design and construct with maximum local hire
- **Lead Responsibility:** City Government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation.  
[http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.2.3 Day Care

- **Issue:** Without proper childcare, a parent cannot meet the responsibilities of their job. An unreliable babysitter can affect all of the workers at a worksite, if the parent is late or misses work. In a small village, the local workforce is significantly reduced if there is no day care facility in a community.
- **Approach:** Operate and maintain a Day Care Facility in Nunam Iqua.
- **Action:**
  1. Community consensus of location and lot size
  2. Research similar facilities to determine cost estimates for:
    - a. Design
    - b. Construction
    - c. Day care employee training
    - d. Operation and maintenance business plan
  3. Develop construction funding Strategy
  4. Confirm site control
  5. Secure funding and necessary permits
  6. Finalize Design and construct facility
  7. Train employees
  8. Implement business plan
- **Lead Responsibility:** Tribal government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation.  
[http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to

## Nunam Iqua Strategic Plan

assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.2.4 Graveyard

- **Issue:** Burial in Nunam Iqua is unorganized. The grave sites on the north and south side of the lake are filled. Random placement of graves affects community development. There is a need for community consensus on the location for future graves.
- **Approach:** Develop a community policy on burial and dedicate a parcel of land for a graveyard in Nunam Iqua.
- **Action:**
  1. Create a policy for burial in Nunam Iqua
  2. Select and get site control for a graveyard that will meet future needs
  3. Solicit funding for fencing around new site and old sites.
- **Lead Responsibility:** Tribal government
- **Possible Funding Sources:**
  1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  2. Rasmuson Foundation: 297-2700. The Foundation provides a series of grants for small community development.

### 10.2.5 Youth Center

- **Issue:** There is a lack of activities for young people in Nunam Iqua. The kids need a place to “hang out”. The facility needs to be monitored.
- **Approach:** The Swan Lake Corporation’s old store is not being used. The Corporation plans to put in a pool table which would provide a place for youths (and adults) to hang out, buy pop, eat microwave foods, and listen to music. A Corporation pool hall would have social economic benefits for the community
- **Action:**
  1. Develop a business plan
  2. Confirm community support
  3. Design the building interior
  4. Secure funding
  5. Renovate the existing building
  6. Train workers
  7. Implement the business plan
- **Lead Responsibility:** Swan Lake Corporation
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation.  
[http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)



## Nunam Iqua Strategic Plan

2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.2.6 Public Sauna

- **Issue:** In 1997, the public sauna caught fire and the washeteria burned down. No sauna was built in the new washeteria because the building is connected to the waterplant. Although there are showers in the waterplant, residents prefer saunas for their health and social benefits.
- **Approach:** To build a sauna facility that is separate from the waterplant washeteria building. To include a safety mechanism in the design to keep the building safe.
- **Action:**
  1. Research similar facilities for reliable cost estimate
  2. Develop a viable business plan for operation and maintenance of a sauna.
  3. Confirm community support
  4. Develop construction funding Strategy
  5. Get site control
  6. Secure funding and necessary permits
  7. Construct with maximum local hire
  8. Implement business plan
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation. [http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.2.7 Library

- **Issue:** There is a small book library at the Lower Yukon Sheldon Point schools, however this facility does not meet the needs of the community. There are no video or DVD materials. There is no access to the internet for individuals interested in taking advance education courses nor is there a quiet place for audio conferences. The VISTA librarian has some funds to begin setting up in the community hall, but not enough to meet the needs of the library.

## Nunam Iqua Strategic Plan

- **Approach:** The community needs a library that has an inventory of videos and DVDs, a telephone for educational purposes, and internet capability for the public.
- **Action:**
  1. Research facility needs and successful programs in other villages
  2. Develop project scope and cost estimate
  3. Determine funding strategy
  4. Secure funding and operation and maintenance costs
  5. Operate and maintain a community library
- **Lead Responsibility:** VISTA librarian and Tribal Government
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation. [http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.2.8 Upgrade Houses

- **Issue:** An estimated 22 houses in Nunam Iqua require various levels of upgrade to support installation of water/sewer services. Some of the older houses will require upgrades beyond the scope of the water/sewer project. For user fees to remain reasonable, it is important that all existing homes are upgraded to support water/sewer.
- **Approach:** Inventory and upgrade all houses in Nunam Iqua able to support water/sewer service.
- **Action:**
  1. Inventory houses during the Nunam Iqua Water/Sewer Improvements Plan Upgrade
  2. Define scope of project and cost estimate
  3. Secure construction funding
  4. Add project scope and construction funds to the water/sewer project if possible.
  5. Upgrade bathrooms using forced account labor
- **Lead Responsibility:** Tribal government
- **Possible Funding Sources:**
  1. AVCP Housing 543-3121 (toll free) 1-800-478-4687
  2. USDA Rural Housing Service 761-7700 USDA's Rural Housing Service offers a variety of loan packages for homeowners, developers, and lenders. These may be used in conjunction with the Tribe's Housing Authority programs.

## Nunam Iqua Strategic Plan

3. Rasmuson Foundation (297-2700): The Foundation provides a series of grants for small community development.

### 10.3 NEW UTILITIES PROJECT

#### 10.3.1 Wind Generator

- **Issue:** The user fee for water/sewer (estimated in the Water/Sewer Utilities Business Plan) is \$116.35. The fee was based on using diesel power. The 1998 Nunam Iqua Water/Sewer Improvement Plan shows:
  1. Residents will use an additional 110 KWH/month
  2. The utility will use an estimate 9100 KWH/month.The current increase in fuel prices will increase the cost of operating the utility. Residents may be unable to afford higher user fees.
- **Approach:** Wind generation is an alternative to diesel generators. The cost/KWH estimated in the Water/Sewer Improvement Plan was \$ .35/KWH. The cost of generating electricity by wind generator could be as low as \$ .05/hour. Even with full PCE funding, the cost saving is significant and would result in lower monthly user fees for water/sewer.
- **Action:**
  1. Determine feasibility by utilizing the Sheldon Point Air station wind data and placing a wind monitor on site
  2. Include wind generation in the Water/Sewer Improvements Plan Update for engineering considerations and cost estimate
  3. Develop construction funding Strategy
  4. Get site control and ROW
  5. Secure funding and necessary permits
  6. Construct project with maximum local hire
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Wind Energy Resource Assessment Program – *Alaska Energy Authority* - The Alaska Energy Authority's Wind Energy Resource Assessment Program is planning to deploy equipment for the collection of wind speed and direction data to assess the potential for wind power production in rural Alaska. The wind tower loan program is aimed at communities with the potential for utility grade wind energy projects. The City of Nunam Iqua has advanced a request to for AEA to conduct such a study. <http://www.aidea.org/Wind.htm>
  2. Alternative Energy and Energy Efficiency Program – *Alaska Energy Authority* - The primary objective of the program is to lower the cost of power and heat to communities while maintaining system safety and reliability. Projects seek to increase efficiency of existing diesel power production and end use as well to develop alternatives to diesel-based energy technology. <http://www.aidea.org/alternative.htm>

## 10.4 NEW TRANSPORTATION PROJECTS

### 10.4.1 Runway Expansion

- **Issue:** The purpose of this project is to address deficiencies at the Nunam Iqua Airport with regards to airport safety and maintenance of the runway and apron. The runway and airport need to be upgraded to current FAA standards.
- **Approach:** Lengthen and widen the existing runway to meet FAA standards
- **Action:**
  1. Rehabilitate runway, taxiway, and apron surface
  2. Widen runway to 100 feet
  3. Construct an airport access road to link the Airport to the community
  4. Set back existing apron to meet FAA safety guidelines
  5. Cover abandoned landfill close to the widened runway
- **Lead Responsibility:** Department of Transportation
- **Funding Source:**
  1. Department of Transportation: Airport Improvement Project N0 61444.

### 10.4.2 Heavy Duty Boardwalks:

- **Issue:** The original boardwalks built for the honey bucket haul system were constructed in fall of 1990. The 2"x 6" X 16' treated lumber, used in building the 8 foot wide boardwalks, is not strong enough. Much damage has been done by large ATVs and heavy carts moving materials to construction sites. Also, several houses have their front steps ending on the boardwalk, creating a hazard for drivers and young children. The AVCP Swan Lake subdivision boardwalks constructed in 1994 were built with untreated lumber and nails. These boardwalks have suffered rapid deterioration.
- **Approach:** Heavy Duty boardwalks are needed to connect the residences with the new gravel roads and complete the transportation backbone in the community:
  1. #1 Running from the causeway gravel road to the Lot 1 on the Sheldons Points Subdivision on the south side of the village = 1400 feet.
  2. #2 Running from the south end of Swan Lake, behind the Sheldons Points Subdivision on the north side of the village = 900 feet
  3. #3 Running from the causeway gravel road through the north side Swan Lake Subdivision= 800 feet.
  4. #4 Running from the last two houses to the tundra pond on the north side of the village= 700 feet.
  5. Note: Heavy Duty boardwalk construction to be completed by AVCP in 2005 will connect #3 and #4. boardwalks
  6. Total project is 3600 feet for heavy duty boardwalk (10' wide) with an ANTHC construction cost estimate of \$425 and \$475 per foot= \$1,710,000.

## Nunam Iqua Strategic Plan

- **Action:**
  1. Complete Long Range Transportation Plan and place inventory with the Bureau of Indian Affairs (BIA).
  2. Obtain conceptual design, permitting requirements, easements, and estimated cost for project.
  3. Secure required 9% matching funds for State Transportation Improvement Plan (STIP)
  4. Submit boardwalk request to STIP and BIA
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. State Transportation Improvement Department of Transportation Dave Sanchez (907) 451-2385
  2. Bureau of Indian Affairs, Michael Niquist (907) 586-7143
  3. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  4. Rasmuson Foundation 297-2700. The Foundation provides a series of grants for small community development.

### 10.4.3 School/Lagoon Gravel Road

- **Issue:** Current water/sewer funding for the 12 foot wide gravel road from the causeway to the lagoon site may be insufficient due to increased prices (fuel, workers comp. etc) on the lagoon construction project.
- **Approach:** Seek funding for the portion of the road that runs from the causeway to the new school site.
- **Action:**
  1. Inform the Lower Yukon School District about the problem
  2. Review design and determine cost
  3. Secure funding
  4. Construct road forced account under the water/sewer project if possible.
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Department of Transportation Contact: Jeff Rafson 451-5150
  2. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  3. Rasmuson Foundation 297-2700. The Foundation provides a series of grants for small community development.

### 10.4.4 Airport Gravel Road:

- **Issue:** The Sheldon Point Airport Improvement Project to extend the runway will require gravel. A sand bar has blocked access to the airport barge landing. With completion of the causeway, the city will have a gravel road that runs from the community barge landing on the north side of the village, across Swan Lake, to



## Nunam Iqua Strategic Plan

- within 900 feet from the airport. There is no gravel road connecting the airport to the community.
- **Approach:** The construction of a gravel road from the causeway to the airport will provide needed community transportation infrastructure and allow the airport runway to be extended.
  - **Action:**
    1. Confirm that airport gravel road is included in the scope of the Sheldon Point Airport Improvement Project N0 61444.
    2. Provide assistance to the Department of Transportation in project review and design.
    3. Prepare for “post-award” conference to encourage local hire.
  - **Lead Responsibility:** Department of Transportation and City of Nunam Iqua
  - **Possible Funding Sources:**
    1. Airport Improvement Project N0 61444.
    2. Department of Transportation Contact: Ryan Anderson 451-5129
    3. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
    4. Rasmuson Foundation 297-2700. The Foundation provides a series of grants for small community development.

### 10.4.5 Boat Harbor

- **Issue:** Boats anchored on the river bank often swamp due to high winds and high water. There is no safe place for boats to anchor.
- **Approach:** Create a safe place for boats to anchor
- **Action:**
  1. Complete erosion control plan
  2. Select safe area to secure boats and develop project design
  3. Get site control for land based facilities
  4. Determine construction funding strategy
  5. Secure funding and necessary permits
  6. Build project with maximum local hire
- **Lead Responsibility:** City government
- **Possible Funding Sources:**
  1. Corps of Engineers 107 Reconnaissance Study Program (907) 753-2504. Projects that are eligible to receive CORPS funding need to complete a 107 Reconnaissance Study.
  2. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.

## 10.5 NEW EDUCATIONAL OPPORTUNITIES

### 10.5.1 Head Start Preschool

- **Issue:** There is no Headstart program in Nunam Iqua. In 2004 the Lower Yukon School District stopped their pre-schooling program for 3 and 4 year olds. Children do better in kindergarten if they have pre-schooling.
- **Approach:** Have a Headstart Program in Nunam Iqua for the 3 and 4 year olds.
- **Action:**
  1. Request temporary space from LYSD
  2. Apply for the Headstart Program to use temporary space in 2005-2006
  3. Receive funding
  4. Train and hire employees
  5. Develop a plan for a permanent facility (build, renovate etc).
  6. Develop a funding strategy for the plan
  7. Secure funding
  8. Implement the plan with maximum local hire
- **Lead Responsibility:** Tribal government
- **Possible Funding Sources:**
  1. Association of Village Council Presidents: Regional Native Non-profit Headstart Program 1-800-478-3521
  2. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation. [http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  3. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.5.2 Old school buildings

- **Issue:** Nunam Iqua is funded for a new school facility with construction scheduled to be completed by 2007. Unless the community decides how to use the existing buildings, they will be torn down. A decision on use must be implemented in a timely fashion or the buildings will become derelict.
- **Approach:** A plan is needed for the future use of these buildings. Once there is a plan it needs to be implemented.
- **Action:**
  1. Research existing data on operation and maintenance of the buildings
  2. Review the facility needs of the strategic plan for possible uses
  3. Solicit additional ideas
  4. Develop a plan and identify lead responsibility for the project
  5. Confirm Community Support
  6. Carryout the plan

## Nunam Iqua Strategic Plan

- **Lead Responsibility:** Nunam Iqua Advisory Planning Board
- **Possible Funding Sources:**
  1. Multi-Use Facility Program 269-4500 Contact Athena Logan 269-4540– Denali Commission funding/Division of Community Advocacy - A variety of uses may be consolidated into a single facility, but priority for funding under this RFP will go to uses associated with life, health and safety. The community may want to consider consolidating the postal service with other community needs such as recreation. [http://www.dced.state.ak.us/dca/multi\\_use.htm](http://www.dced.state.ak.us/dca/multi_use.htm)
  2. USDA Community Facilities grants and loans. 761-7700 The Rural Development: Community Facilities Grants Programs provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.

### 10.5.3 Workforce Development

- **Issue:** With declining income from commercial fishing and an increase in the local workforce, the community needs more employment opportunities. Without the certified training required on many capital projects, local residents are not qualified for local construction jobs.
- **Approach:** Local residents need access to training and more job opportunities
- **Action:**
  1. Establish system to develop resumes for local residents
  2. Partner with existing training programs to prepare for scheduled projects.
  3. Request Post award community conferences in all contracts to introduce local workforce.
  4. Develop a local protocol for contractors to follow when doing construction in Nunam Iqua.
- **Lead Responsibility:** Nunam Iqua Advisory Planning Board
- **Possible Funding Sources:**
  1. AlaskaWorks Contact: Dan Rednall 569-4711
  2. Iqalliarvik Economic Development Corporation (IEDC) and Yukon Delta Fisheries Development Association (YDFDA) whose purpose is to create income and employment opportunities in the high seas fisheries for Yukon Delta residents as well as offer scholarships and training. Deborah Vo 1-877-644-0326.

## 10.6 NEW ENVIRONMENTAL PROGRAMS

### 10.6.1 Subsistence Protection

- **Issue:** Promoting the subsistence lifestyle is a community goal. Air pollution from burning trash, as well as hazardous and toxic materials left in the dump site and/or around village, could potentially affect subsistence activity.
- **Approach:** Protect subsistence by developing a plan to deal with potential pollution.
- **Action:**

## Nunam Iqua Strategic Plan

1. Apply for funding of a planning project
  2. Seek assistance for research on the matter
  3. Secure funding
  4. Develop a plan for subsistence protection
  5. Implement the plan
- **Lead Responsibility:** Nunam Iqua Advisory Planning Board
  - **Possible Funding Sources:**
    1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.

### 10.6.2 Disaster Plans

**Issue:** A major flood occurred in October 2004 causing damage in the community. Mitigation funds were not available because there was no Hazard mitigation plan. Nunam Iqua faces other potential hazards and has no plan.

- **Approach:** Develop local Multi-Hazard Mitigation Plan
- **Action:**
  1. Check status of current application
  2. Secure funding
  3. Establish project timeline
  4. Follow project scope to develop a plan
- **Lead Responsibility:** Nunam Iqua Advisory Planning Board
- **Possible Funding Sources:** Division of Homeland Security and Emergency Management Hazard Mitigation Grant Program (Scott Simmons 1-800-478-2337)

### 10.6.3 Erosion

- **Issue:** The river bank continues to erode due to the Yukon River. This loss of land is a threat to existing structures. Historical data and current student studies document the need for erosion control.
- **Approach:** Develop a phased plan to stop the erosion of the river bank by the Yukon River and secure the safety of community structures. Implement the plan
- **Action:**
  1. Collect all historical and current data on the erosion problem
  2. Using local knowledge predict the outcome of doing nothing.
  3. Secure funding to determine viable options
  4. Select option
  5. Get site control, and necessary permits
  6. Complete plan with phased approach for funding
  4. Designate lead responsibility
  5. Develop funding Strategy for constructing erosion control
  6. Secure funding
  7. Construct with maximum local hire
- **Lead Responsibility:** Nunam Iqua Advisory Planning Board

## Nunam Iqua Strategic Plan

- **Possible Funding Sources:**

1. Corps of Engineers 107 Reconnaissance Study Program 753-2504. Projects that are eligible to receive CORPS funding need to complete a 107 Reconnaissance Study.
2. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.

### 10.7 NEW ENTERPRISE EMPLOYMENT OPPORTUNITIES

#### 10.7.1 Flyout Fishery

- **Issue:** In the past, the primary source of income for many residents has been the commercial salmon fisheries. Reduced salmon stock has resulted in lower incomes.
- **Approach:** Value added by local hire in processing will increase the local revenue from fishing. A flyout fishery could include other species, besides salmon, such as sheefish, bering cisco, and blackfish.
- **Action:**
  1. Gather information from the Yukon Delta Fisheries Development Association on flyout fisheries.
  2. Confirm marketability of the products
  3. Develop a project design and cost estimate
  4. Develop a business plan for operation and maintenance
  5. Develop a construction funding strategy
  6. Submit a formal request to YDFDA for funding
  7. Get site control and necessary permits
  8. Construct facility with maximum local hire
  9. Implement Business Plan
- **Lead Responsibility:** Tribal government
- **Possible Funding Sources:**
  1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  2. Yukon Delta Fisheries Development Association (YDFDA) whose purpose is to create income and employment opportunities in the high seas fisheries for Yukon Delta residents as well as offer scholarships and training. Ragnar Alstrom 1-800-644-0326.

#### 10.7.2 Ice maker

- **Issue:** The high quality fish market has become more competitive. Although King Salmon caught at Black River and the south mouth of the Yukon are the best in the world, the quality of the flesh deteriorates if not kept cold. The Nunam Iqua Waterplant needs to sell more water to be able to keep rates low for all customers.



## Nunam Iqua Strategic Plan

- **Approach:** Make ice from water purchased the City waterplant so that fishermen can keep fish cold and get high prices.
- **Action:**
  1. Gather information from the Yukon Delta Fisheries Development Association on icemakers installed in Kotlik and Marshall.
  2. Develop a project design and cost estimate with a viable operation and maintenance plan
  3. Submit formal request to YDFDA for funding
  4. Get site control and necessary permits
  5. Import/construct ice maker
- **Lead Responsibility:** City government
- **Possible Funding Source:**
  1. Department of Commerce-Mini-Grant Program Contact: Jo Grove 451-2716. This program allows for a variety of small grants not to exceed \$30,000.
  2. Yukon Delta Fisheries Development Association (YDFDA) whose purpose is to create income and employment opportunities in the high seas fisheries for Yukon Delta residents as well as offer scholarships and training. Ragnar Alstrom 1-800- 644-0326.

## 11.0 CARRYING OUT THE PLAN

### 11.1 Lead Responsibility

Nunam Iqua Strategic Plan has identified numerous projects that are needed for a balanced sustainable community. All projects have identified an entity as having the lead responsibility for the project. Prioritizing multiple projects by the lead agency is the responsibility of the elected City Council, Tribal Council, and the Nunam Iqua Advisory Planning Board. The current boards have prioritized as follows:

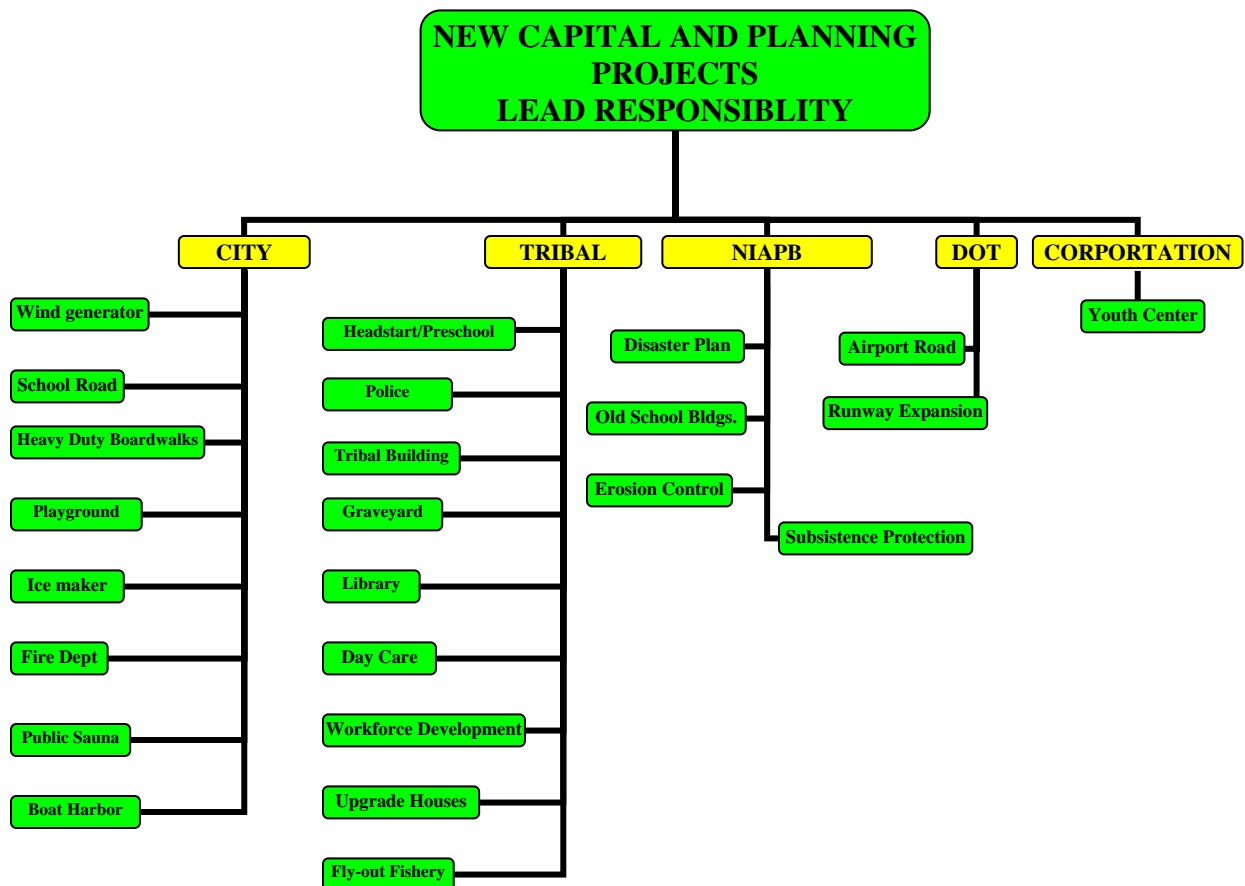


Figure 22: New Capital and Planning Projects-Lead Responsibility Chart

### 11.2 Adoption

Since the Nunam Iqua Advisory Planning Board is made up of representatives from the City of Nunam Iqua, the Nunam Iqua Traditional Council and the Swan Lake Corporation, each entity was kept informed of the progress of the Nunam Iqua Strategic Plan for Comprehensive Development. Upon completion, each entity passed a resolution of support. See **Appendix A- Support Resolutions**.

### 11.3 Review Process

The goal of Nunam Iqua Strategic Plan for Comprehensive Community Development is to create a balanced sustainable community that respects the values and goals of its members. This plan has been prioritized for controlled but steady development of infrastructure and economy. The elected officials, who have supported this plan, cannot foresee unknown outside forces that may have an effect on community development, nor can future elected officials be limited in their ability to make changes. Therefore the Nunam Iqua Advisory Planning Board decided that a review process can be initiated by resolution at any time.

## 12.0 ACKNOWLEDGEMENTS

### 12.1 Planning Contributors

**This plan was produced in part with Mini-Grant Assistance funds made available through the Department of Commerce, Community and Economic Development and the Denali Commission.**

- Carin Finch- NIAPB Planning Project Coordinator
- Jill Davis and Pauletta Bourne- Department of Community and Economic Development, Division of Community Advocacy Mini-Grant Program
- Deborah Vo and Lamar Cotten- Iqalliarvik Economic Development Corporation (IEDC) Yukon Delta Fisheries Development Association (YDFDA)
- Ryan Anderson- Department of Transportation
- Keith Jost and George Plumley- Department of Community and Economic Development, Division of Advocacy Community Profile Maps & Municipal Land Trustee/ANCSA 14C3-
- Christy Miller- Department of Community and Economic Development, Division of Community Advocacy Flood Mitigation Assistance
- Matt Dixon- Alaska Native Tribal Health Consortium
- Reuben Loewen- Alaska Industrial Development and Export Authority, Alaska Energy Authority

### 12.2 References

- **Community Strategic Plan Guide and Form: A Straight Forward Way to Get What You Need-** United States Department of Agriculture-Rural Development Alaska, Denali Commission, Alaska Humanities Forum, May 2001.
- **Market Assessment of Yukon Delta Tourism Opportunities-** Yukon Delta Fisheries Development Association with the McDowell Group, September 2004.
- **Nunam Iqua Bulk Fuel Upgrade-** Alaska Energy Authority, 2001
- **Nunam Iqua Utilities Business Plan-** Nunam Iqua Advisory Planning Board, City of Nunam Iqua, Village Safe Water, 2003.
- **City of Sheldon Point Nunam Iqua Water and Sewer Improvement Plan-** City of Sheldon Point with CE2 Engineers, January 1998.
- **When Our Bad Seasons Comes- A Cultural Account Of Subsistence**

## Nunam Iqua Strategic Plan

- Harvesting And Harvest Distribution In The Yukon Delta**, Ann-Fienup-Recordan, Alaska Anthropological Association Monograph Series, 1986
- **Wetland Delineation Report- Sheldon Point Airport** Alaska Department of Transportation and Public Facilities Project No. 61444, March 2005
  - **State of Alaska Commercial Fisheries Entry Commission 2005 Permit Holder List**
  - **Wade Hampton Census Area-Quarterly-Employment & Earnings, January-March 2004** Department of Labor and Workforce Development
  - **Community Planning Resources-** Denali Commission Updated 03.03.04
  - **Western Alaska Economic Diversification Strategy Local Decisions About Local Economies-** Division of Community and Business Development/Department of Community and Economic Development/ June 2002
  - **Getting Started On 14 (c) (3)/Department of Community and Economic Development-** February 2003
  - **What is Site Control:** Keith Jost, Division of Community Advocacy, 2003
  - **The Updated Plain English Guide to Alaska Drinking Water and Wastewater Regulations-** Department of Community and Economic Development/Department of Environmental Conservation/June 2002
  - **Alaska Sanitation Planning Guide: A Guide for Small Communities-** State of Alaska Department of Environmental Conservation Department of Environmental Conservation, June 1999.
  - **Seven Generations- Addressing Village Environmental Issues for the Future Generations of Rural Alaska-** United States Environmental Protection Agency, State of Alaska Department of Environmental Conservation, Chugachmuit, March 1999.
  - **Community Planning-** Community Development Tech Notes, Office of Community Development United States Department of Agriculture-Rural Development, March 1997.
  - **Environmental Planning for Small Communities A Guide for Local Decision-Makers-** United States Environmental Protection Agency EPA/625/R-94/009, September 1994
  - **Strategic Planning for Community Development: Community Development series** (Kansas State University)
  - **Yukon-Kuskokwim Delta Transportation Study-**An Element of the Alaska Statewide Transportation Plan-

### **APPENDIX A: Support Resolutions**

### **APPENDIX B: Name Change**

### **APPENDIX C: Community Funding**

- **DCED Community Funding Database**
- **RAPIDS**

### **APPENDIX D: Regional Organizations**

### **APPENDIX E: Subsistence Resources**

**APPENDIX F: Maps**

- **Airport Improvement 2005**
- **Erosion Map 1951-2001**
- **Future Land Use Map**
- **Graveyard Location Map**
- **Native Allotment Map 2005**
- **Survey Aerial Basemap 2003**
- **Wetland Habitat Map 2005**



**Available on CD**

**APPENDIX G: Resources and Links**

**APPENDIX H: Reports**

- **Causeway Conceptual Plan 2005**
- **Causeway Feasibility Study 2002**
- **Nunam Iqua Water/Sewer Improvements Plan 1998**
- **RUBA Report 2005**
- **Wade Hampton Census Area Economic Overview**
- **Wetland Delineation report 2005**

**APPENDIX I: Soil Studies**

- **Airport Geotech Report 1993**
- **Causeway and Lagoon Soils Investigation 2001**

**APPENDIX J: Environmental Assessments**

- **Airport Improvement Project 2005**
- **Causeway 2004**